Lehigh Carbon Community College

2024-2025 Course Catalog - Spring

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Elective Courses

Program Electives

Program electives are courses listed within a given degree program, which may be program specific or may not be major specific but are intended to further enhance a student's education in her or his chosen field. These courses may fall under a program-specific category, which is given a designated prefix within the program of study.

- **Required Program Electives** - Required program electives must be chosen from a stated list of courses in order to fulfill the program elective requirement.
- **Recommended Program Electives** - Recommended program electives should be chosen from the stated list of courses in order to best benefit the student.

Free Electives

Free electives are credit courses a student may choose to take to pursue a broader interest in any subject area, while still earning credit toward graduation. Free electives fulfill neither General Education requirements nor the program requirements. Students may choose any college- level course, numbered 101 or higher, to fulfill a free elective requirement, unless otherwise specified in a degree program.

General Education Electives

General Education electives are courses that promote intellectual habits to act intentionally in the world. These courses prepare people to think by identifying, framing and examining problems; generating, evaluating and selecting solutions; reflecting upon personal and others' experiences; testing ideas and opinions; reviewing practices; and evaluating conclusions (LCCC General Education Philosophy). General Education electives are selected from the disciplines of humanities, social sciences, mathematics and sciences.

CIS 105
CMN 101, 105, 112, 115, 120, 121, 201, 225
ENG 111, 225
Humanities Electives: (see below)
HPE: Any course
IDS 225
Math: Any course 105 or higher
PED: Any course
Science Electives: (see below)
Social Science Electives: (see below)

English Electives

English electives are courses focused on analytical and critical skills related to reading and writing, and the examination of writing patterns that elicit an intellectual and emotional response. These courses encourage the development of writing skills in idea generation, informational literacy, use of logic and sound communication, as well as interpretive skills related to aesthetic sensibilities, social perspective and cultural awareness.

Humanities Electives

Humanities electives are focused on a recognition of the human condition, communicated via written and spoken word, that fosters a comprehensive awareness and perspective; the formation of critical judgments concerning various forms of art and expression; an understanding of the human capacity for reason and the history of experience; and evaluation of issues related to civic and ethical responsibilities and cultural sensitivities.

ART 101, 110, 112, 115, 212
CMN 125
ENG 154, 201, 202, 205, 206, 210, 211, 215, 220, 227, 230, 232, 237, 238, 242
GRM 101 may be chosen for A.A.S. degree only
HIS 123, 124, 126, 130, 131, 220, 222, 224, 225, 260
IDS 154, 214, 215
MUS 101, 105, 107, 110
PHI 201, 203, 205, 210
World Language: ARB, ASL, CHN, FRN, GRM (105 or higher), SPN (105 or higher)

Mathematics Electives

Mathematics electives are courses that promote critical thinking, logic and quantitative reasoning skills. Mathematics electives support quantitative problem solving in applied settings and often serve as prerequisites to other courses in which these skills are needed.

Science Electives

Science electives focus on scientific reasoning skills and concepts in the examination of three major areas of the natural world. These courses present theoretical knowledge and scientific empirical research processes of observation, experiments and hypothesis testing. A science elective must be chosen from the Astronomy (AST), Biology (BIO), Chemistry (CHE), Physics (PHY) or Science (SCI) department. If a student plans to transfer to a four-year college or university, they will need to take a four- to five-credit laboratory science course.
SCI 105 - This elective course is not appropriate for science majors.

Social Science Electives

Social Science electives are courses that examine disciplines which are theoretically based and employ scientific methods to study human conditions.

ECO 201, 202, 237
GEO 110, 115, 260
IDS 154, 214, 215
PSC 130, 141, 142, 233, 235, 236, 237, 239 260
PSY 120, 140, 142, 145, 240, 242, 243, 250, 255, 256, 260, 283
SOC 150, 151, 154, 155, 250, 251, 253, 254, 258, 260, 283

Studio Art Electives

Studio Art electives are an exploration of traditional and contemporary forms, processes, techniques and experiences of making art. Through historical and aesthetic perspectives, Studio Art electives provide the opportunity to design and create art projects that integrate all learned techniques in order to successfully communicate conceptual ideas through visual language.

ART 107, 108, 109, 110, 112, 115, 118, 119, 125, 128, 130, 132, 135, 145, 150, 153, 181, 210, 219, 225, 226, 229, 230, 235, 242, 247, 248, 251, 252, 260, 265

Honors Projects and Sections

Students with a 3.0 GPA may enroll in Honors Sections or complete Honors Projects in their courses. Students in the College Honors program are required to complete five courses with Honors grades.

Honors Projects

Honors Projects can be completed in almost every class at LCCC.
Students work directly with the instructor of the course to develop an honors project. This project is completed in addition to the work required in the class. Applications to complete an Honors Project are available in the Advising Office on main campus (SSC124).

Honors Courses

Honors courses are sections of classes that are taught at an honors level. Honors sections do not necessarily mean more work, rather students are expected to complete work at a higher level and with a deeper understanding of the material. The basic course information is the same as all other sections of the course, but in the honors course the teacher may pick a theme to tie everything together, or spend more time on real-world applications of the course material. Honors courses change each semester and are listed on the course schedule.

Course Details

The college offers courses on various levels to fulfill the concept of open-door admission and still maintain academic standards for awarding certificates and degrees. Use the subpages on the left to find details about each of the below areas.

Placement Testing

The College uses placement testing to ensure students are placed in the appropriate level for reading, writing, mathematics, and science coursework.

Course Terminology

Get the definitions for gateway courses, credit courses, credit values, prerequisites, corequisites, and course substitutions.

Course Modality

Find out what makes a course face-to-face, remote, online, hybrid, or an extended classroom.

Alternative Courses

Discover the experiential and alternative course-types such as fieldwork, internships, clinicals, special topics courses, independent study, or individual study.

Course Details

Placement Testing

Placement Testing

Lehigh Carbon Community College placement ensures that incoming students have the prior knowledge that allows them to be successful in college coursework. The college uses multiple measures to determine student placement in Reading, Writing, Mathematics and Science for entrance into college-level courses. Student placement is determined by LCCC Placement Tests administered by the institution. Placement standing may also be met by exemption criteria as outlined below. If a student does not submit evidence from which the college can determine placement, the student will be directed to take college placement tests. Students that do not wish to take the LCCC placement test and wish to enroll in pre-college classes may do so.

Based upon review of transcripts or other evidence, students may be placed into Gateway Courses. Students wishing to challenge such decisions may take LCCC placement tests to earn scores for higher-level course placement. Students may not take the placement test while enrolled in a Gateway Course.

A Summer Bridge program is available for students who want to review skills, reinforce foundational concepts, and become familiar with college expectations. After successful completion of the Summer Bridge program, students can retake the LCCC placement test.
If a student is required to enroll in a Gateway Course(s), it is recommended that the student begins that work in his/her first semester and continues until the requirements are complete. An exception can be made if the pre-college course is a math course and the student wishes to enroll in a course(s) with no prerequisite. Gateway Courses do not count towards graduation requirements.

Placement Testing for Guest/ Visiting/Non-matriculated:

Guest/Visiting/Non-matriculated students must meet individual course prerequisites. Placement testing may be required. An unofficial transcript may be used to determine prerequisite exemptions.

Placement Testing for Dual Enrollment & Early College

High school grades as well as test scores from PSAT, Advanced Placement and LCCC Placement Test will be used to qualify high school students into the Dual Enrollment or Early College programs.

Placement Test Score, Placement Status, and Exemptions

Writing Placement

WRITING PLACEMENT LEVEL	PLACEMENT TEST SCORE	ENG COURSE ELIGIBLE	EXEMPTIONS
	0	Retest	
Entry Level	1 & 2	ENG 099	
Entry Level	3	ENG 100	
Intro Level	4-6	ENG 105	• SATV: 480 or higher • PSATV Reading/Writing: 480 or higher • ACT Reading: 20 or higher • Accuplacer: 222-241 • GED test score (Language Arts): 165 or higher • TOEFL iBT: score of 79 or higher or TOEFL cbt: score of 231 or IELTS: score of 7 or higher. • 12th Grade: English 1st Qtr. grade of B or higher or AP English/Literature/ History • 2 U.S. college courses (6 credits) of Humanities or Social Studies with a C+ or higher • Completion of a U.S. college degree

Reading Placement

READING PLACEMENT LEVEL	PLACEMENT TEST SCORE	RSS COURSE ELIGIBLE	EXEMPTIONS
Entry Level	50-78	RSS 099	n/a
Entry Level	79-93	RSS 100	n/a
Intro Level	94-150	n/a	• SATV: 480 or higher • PSATV Reading/Writing: 480 or higher • ACT Reading: 20 or higher • Accuplacer Reading: 242 or higher, or • GED test score (Language Arts): 165 or higher, or • TOEFL iBT: score of 79 or higher or TOEFL cbt: score of 231 or IELTS: score of 7 or higher. • Advanced 12th Grade: English 1st Qtr. grade of B or higher or AP Literature AND 1st Qtr. grade of B or higher in Social Studies or AP History, • 2 U.S. college courses (6 credits) of Humanities or Social Sciences with a C+ or higher, or • Completion of a U.S. college degree

Math Placement

MATH PLACEMENT LEVEL	COLLEGE READY PLACEMENT TEST SCORE	EDREADY TEST	EDREADY PATHWAY	MAT COURSES ELIGIBLE	EXEMPTIONS
Entry Level	20-76	< 68 EDRMT1	< 90 EDRMP2	MAT 090 MAT120	
Intro Level	77-94	< 68 EDRMT1	**AND ≥** 90 EDRMP1	MAT 105 MAT 118 MAT 121	• SATM: 500 or higher • PSAT Math: 500 or higher • ACTMath: 21 or higher • GED Math: 165 or higher • High School Math: Algebra I with a grade of B or higher
		≥ 68 EDRMT1			
Mid-Level	95-106	< 66 EDRMT2	**AND ≥** 90 EDRMP2	MAT 125 MAT 130 MAT 150 MAT 155 MAT 160	• SATM: 600 or higher • ACTMath: 29 or higher • High School Math (2 units of math): Algebra II with a grade of B or higher
		≥ 66 EDRMT2			
Upper Level	107-108	< 66 EDRMT3	**AND ≥** 90 EDRMP3	MAT 165 MAT 170 MAT 188	• High School Math: Algebra III/ Trigonometry with a grade of B or higher
		≥ 66 EDRMT3			
Advanced Level	109-120	< 70 EDRMT4	**AND ≥** 90 EDRMP4	MAT 191	• ATM: 650 or higher • ACTMath: 29 or higher • AP Calculus AB or BC: grade of C or higher • High School Calculus: grade of B or higher
		≥ 70 EDRMT4			

Science Placement

PLACEMENT LEVEL	PLACEMENT TEST SCORE	SCIENCE COURSES AVAILABLE
Chemistry Placement	35 or higher	CHE111
Biology Placement	25 or higher	BIO163

Course Details

Course Terminology

Gateway Courses

Based on placement testing in reading, writing and math, these prerequisite courses may have to be taken before placement in College English or Mathematics beginning the first semester and concurrently until successful completion. Gateway courses can be identified by course numbers 090, 099, or 100. These courses are pass/fail, nontransferable, and will not impact the student GPA.

Credit Courses

Courses with a course number 101 or above are taken for credits matching the total course count. These courses will appear as part of the student's transcript and all coursework with a final grade will count toward the student GPA. See course terminology for explanations of credit counts, prerequisites, and corequisites.

Course Credit

The credit value for each course is shown in the Catalog under Credit Hours.

- **Total Credits** - awarded credits for completion of the course.
- **Lecture Hours** - The college defines a semester credit hour as a unit of coursework equivalent to 50 minutes of lecture instruction and student engagement per week for fourteen weeks.
- **Lab Hours** - The college defines a laboratory as requiring 3.0 hours of structured laboratory weekly for one semester credit hour (54 X 3 = 161 minutes per week) for 14 weeks with the faculty member and the student.
- **Other Hours** - experiential learning hours such as an internship, clinical, or fieldwork requires a student to complete a minimum of 75 hours over the semester for one credit.

Prerequisite

A prerequisite is a course or skill level that must be completed or achieved prior to enrollment in a particular course.

Corequisite

A corequisite is a requirement that must be satisfied at the same time or before a particular course is taken.

Course Substitution

Students may petition for a course substitution by meeting with an advisor or faculty member to discuss and submit an electronic request. Students must meet eligibility requirements and follow procedures for consideration of a course substitution.

Course Details

Course Modality

Face-to-Face Class

Provides traditional instruction in a classroom at the Schnecksville Campus or at the Allentown, Airport or Tamaqua sites.

Remote Class

provides a live, real-time, virtual classroom experience for students who do not attend class in person.

- Students see the instructor's presentation and have an opportunity to virtually interact with the instructor and other students. Instructors hold class during the designated times on the college's schedule and take attendance and require participation.
- Students are expected to schedule this class into their day or evening as if they were taking the class on an LCCC campus or site.
- Remote classes use software, such as Zoom, that creates a virtual classroom.
- Course assignments and assessments will be submitted and graded in the Canvas learning management system, accessible through the student's mylccc portal.
- Remote class sections are identified on the Course Search at www.lccc.edu. "Remote" will be listed under the Location and the Site of these classes will be identified as "Distance Education." Times and days will be noted on the schedule. Students must have access to a computer, webcam, Internet service, and possess basic computer, Internet, and email skills.

Online Class

Provides course content, assignments, and all assessments within the Canvas learning management system accessible through the student's mylccc portal.

- Students are required to independently read the course content and complete the objectives of the class in the course modules based on the instructor's guidelines and deadlines.
- Students are not expected to log into their Canvas online course at specific times or on specific days; however, students must log in often, as directed by their instructor, to be successful.
- Online instructors may require the use of the many tools available in Canvas, such as Zoom.
- Online class sections are identified on the Course Search at www.lccc.edu by the letter N or XN. (for example ENG 105-N2). "Online" will be listed under the
- Location and the Site of these classes will be identified as "Distance Education." No times or days will be noted on the schedule.
- Online classes may also use Zoom.
- Students must have access to a computer, webcam, Internet service, and possess basic computer, Internet, and email skills.

Hybrid Class

A blend of face-to-face instruction (either in a traditional class environment or in a remote virtual classroom) with an online course in Canvas, the college's learning management system.

- At least 50 percent of instruction occurs in a face-to- face classroom at the Schnecksville Campus or at the Allentown, Airport or Tamaqua sites or in a remote virtual classroom such as Zoom.
- Hybrid courses are identified on the Course Search at www.lccc.edu by the letters HY (for example, PSY140-HY1). Students must have access to a computer, Internet service and possess basic computer, Internet, and email skills.

Extended Classroom

Combines a face-to-face class with a remote class. Instructor uses 360o camera in the classroom and Zoom web conferencing system to conduct class. Students sign up for either the face to face or remote section. Students in the remote section must have access to a computer, Internet service and possess basic computer, Internet and email skills. Students in the face-to-face section, please see requirements for class.

Course Details

Alternative Courses

Fieldwork

An experience to gather anthropological or sociological data through the interviewing and observation of subjects in the field.

Internship

An out-of-class experience, typically for advanced students, to gain supervised practical experience in the work place.
Internships are designed to give students an opportunity to combine classroom study with practical on-the-job experience. Internships provide students the opportunity to earn academic credit while gaining experience with employers. An internship may or may not involve being awarded academic credit. Some internship experiences are paid, while some are unpaid. Students wishing to enroll in an academic credit internship should contact the appropriate program coordinator early in the semester preceding the semester in which the student wishes to register for the academic internship. Students are encouraged to contact the Career Development Center at 610-799-1559 for additional information and assistance in obtaining internship opportunities.

Clinical/Practicum

A course of study that involves the supervised practical application of previously studied theory.

Special Topics Course

These courses provide the opportunity to receive credit for special interest topics, within a subject area, which are not covered in depth within existing courses. Courses will be designated 297. Special topics courses can be used as free electives only.

Independent Study

Independent study at LCCC provides an opportunity for selected students to investigate subject matter in a deeper, more focused and more advanced way than that provided in an existing course. It is not to be considered a substitute for an LCCC course already in the catalog. Topics for independent study are generally selected in consultation with a faculty member, with special attention given to the interests and abilities of the student requesting the experience. Independent study is intended to supplement and enrich a student's knowledge in a given discipline. Contact Academic Services at 610-799-1587.

Independent / Individual Study Guidelines

1. Course substitution should be used whenever possible provided that a reasonable alternative can be found.
2. It is the student's responsibility to enlist a faculty member to provide the necessary instruction and support for the course.
3. Students must have approval for individualized or independent study from the faculty member, school dean and the vice president for academic services and student development.
4. Students must successfully complete at least 12 credit hours of course work at LCCC before being eligible for individualized or independent study.
5. A student can register for only one individualized or independent course in any given semester. It is understood that the course work is to be completed within the semester for which the student is registered.
6. A maximum of 12 credit hours may be earned through individualized and independent study per program/ degree.
7. Students are expected to meet all objectives of the course, and the instructor must devise a means for evaluating the student that is consistent with sound academic practice and college policies. Tests, papers, reports, library assignments and other means of evaluation should be as rigorous and comprehensive as those required in comparable classes.

Degree, Certificate and Specialized Credit Diploma Requirements

Selection of courses applicable for graduation requirements is the responsibility of each student. The student should follow the catalog the year they enrolled as a new student. If the student changes their major after they initially apply, they must follow the new program requirements in the semester they are changing their major. Students who attended classes at the college previously, but then discontinued their enrollment in the past 12 months or more, must complete an online returning student application and follow the new catalog requirements. Students may request a "Petition to Change Catalog Term" if their program has been updated by new curriculum. This form must be signed prior to registration before their last semester by an advisor or counselor and submitted to the Office of Registration/Student Records.

Degrees:

The general requirements for all associate degrees are as follows:

1. Attain at least a 2.0 program and cumulative GPA. Courses with "F" grades will not count toward degree requirements.
2. Fulfill all financial obligations to the college.
3. Courses numbered below 101 may not be used toward the degree or certificate.
   NOTE: Physical education courses may not be repeated for credit.

Associate in Arts (A.A.) and Associate in Science (A.S.) Degrees

1. Fulfill the general requirements as listed previously.
2. Successfully complete at least 60 credits in an approved program of study, of which 15 credits must be taken at LCCC through course enrollment.
3. Complete core requirements of the appropriate program
4. Complete 22 credits in general education:

College English Series (ENG 105, 106)	6 credits	
Humanities and Social Sciences	9 credits	
Mathematics	3 credits	
Laboratory Science	4 credits	

NOTE: ENG 100 and MAT 090 may not be used to satisfy the credits required in the College English series or the credits required in mathematics or science. All general education courses must be courses numbered 101 or higher.

Associate in Applied Science (A.A.S.) Degree

1. Fulfill the general requirements as listed previously.
2. Successfully complete at least 60 credits in an approved program of studies, of which 15 credits must be taken at LCCC through course enrollment.
3. Complete the required courses in the specific program.
4. Complete 21 credits in general education:

College English Series (ENG 105 and ENG 106, 107, or 108)	6 credits	
Mathematics/Science	6-8 credits	
Humanities and Social Sciences	6 credits	
General Education Elective	3 credits	

NOTE: ENG 100 and MAT 090 may not be used to satisfy the credits required in the College English series or the credits required in mathematics or science. All general education courses must be courses numbered 101 or higher.

Dual Associate Degrees

Students may pursue and earn two associate's degrees simultaneously from Lehigh Carbon Community College. Dual associate degrees may be awarded upon completion of the following:

1. Application for dual associate degrees must be submitted after successful completion of 12 college-level credits with a minimum cumulative GPA of 2.0.
2. All requirements are met for each major.
3. Both degrees must be earned and awarded within the same semester. Each degree requires a separate application for graduation.
4. Students must take and earn a minimum of 15 credits from each major at LCCC through course enrollment.
5. A minimum of 15 unique credits not applied to the other major must be taken and earned.
6. Students using financial aid assistance should speak to the Financial Aid Office about their plans for dual associate degrees. Eligibility can change depending on academic progress and grant/loan limitations.
7. A student may not earn an Associate in General Studies and Associate in Liberal Arts at the same time. Student are discouraged from combining either of these with another AA or AS degree.

Additional Associate Degrees

A student may earn multiple Associate Degrees from Lehigh Carbon Community College. Each additional degree will be posted to the student's academic record and the student will receive diplomas for each degree. Students who already possess an associate degree may be awarded an additional degree upon completion of the following:

1. Meeting the general requirements as outlined for all associate degrees in the course catalog.
2. Earning a minimum of 15 credits with courses 101 and above required by the additional degree at Lehigh Carbon Community College, which have not been applied to any previously awarded degree. The 15 additional credits required can be completed before or after awarding of the previous degree.
3. Students must fulfill all prerequisite, general education and major related course requirements for the program as outlined in the course catalog.
4. Students using financial aid assistance should speak to the Financial Aid Office about their plans for a second degree. Eligibility can change depending on academic progress and grant/loan limitations.

Certificate

1. Complete an approved certificate program of at least 30 credits in courses numbered 101 or higher, of which at least 25% of the credits must be taken at
2. LCCC through course enrollment.
3. Earn an overall GPA of at least 2.0.
4. Fulfill all financial obligations to the college.
   Credits earned in certificate programs are applicable to Associate in Applied Science (A.A.S.) degrees in the same field.

Specialized Credit Diploma

1. Complete an approved specialized credit diploma program of at least 9 credits in courses numbered 101 or higher, of which at least 25% of the credits must be taken at LCCC through course enrollment.
2. Earn an overall GPA of at least 2.0.
3. Fulfill all financial obligations to the college.
   Credits earned in most specialized credit diploma programs are applicable to certificates in the same field.

Graduation

All students who wish to graduate with a degree, certificate or specialized diploma must submit an application for graduation.
Graduation applications are available online at "myLCCC" portal and select BannerWeb, click on Student Self Service, and then click Graduation Application.
Applications should be completed and submitted to the Registration/Student Records Office no later than:

- October 1 for December graduation
- February 1 for May graduation
- June 1 for August graduation

The college holds a traditional commencement ceremony in May for all graduates. December graduates are invited to attend the commencement ceremony in May following their graduation date. Future August graduates are invited to attend the commencement ceremony in May.
Commencement details will be communicated via email to all students.

Graduation with Academic Honors

Students who earn an overall GPA of at least 3.5 will graduate "with honors," as indicated below:

- Summa Cum Laude (Highest Honors) – GPA of 3.95 and above
- Magna Cum Laude (High Honors) – GPA of 3.75 to 3.94
- Cum Laude (Honors) – GPA of 3.5 to 3.74

Academic Awards

Outstanding graduating students are honored annually for their achievements. Awards presented include the following:

- All-Pennsylvania Academic Team
- Associate Degree Nursing Faculty Recognition Award
- Clark E. "Willie" Hartman Award
- Climax Goulder Bealine Award
- Computer Science Faculty Recognition Awards
- Country Doctor Veterinary Hospital Award
- Distinction in Psychology Award
- Distinction in Science Award

- Gilbert A. Scheetz Scholastic Achievement Award
- Jennifer Smith Memorial Veterinary Technician Award
- Jennifer L. Snyder Memorial Veterinary Technician Award
- Joanne Gerken Graduation Speaker Award
- LCCC Faculty Association Student of the Year Award
- Lehigh County Chapter of American Association of Medical Assistants Award
- Lehigh County Medical Society Awards
- Mathematics Achievement Award
- Occupational Therapy Assistant, The Professional Development Award
- Occupational Therapy Assistant Student Association Award
- Occupational Therapy Assistant Outstanding Student Award
- Occupational Therapy Assistant Student Scholarship Award
- Pennsylvania Institute of Certified Public Accountants Award
- Philip Fahy Memorial Award
- Professor Elizabeth (Bette) Hummer Memorial Award
- Professor William L.F. and Mrs. Mary Joan Schmehl Political Science Organization Alumni Award
- Rosemary Kradel Mathematics Achievement Award
- Student Nurses Association of Pennsylvania (SNAP) - LCCC Chapter Service Award
- Teacher Education Student Association Scholarship Award
- Wayne E. Kirker Award
- Wright Veterinary Medical Center Veterinary Technician Award

Online Education

Lehigh Carbon Community College provides convenient and affordable online courses and programs for students who wish to start, enhance or supplement their education. By choosing from a wide variety of online courses, students may earn one of the following degrees, certificates or specialized credit diplomas from the convenience of home or office.

PROGRAMS	COMPLETELY ONLINE	80% OR MORE ONLINE*
Accounting (ACC)	X	X
Accounting Cert (ACCC)	X	X
Admin Assistant Certif (ADMC)	X	X
Business Administration(BUAA)		X
Business Management (BMG)	X	X
Business Management Certificate	X	X
Corrections Certificate(CRRC)	X	X
Criminal Justice Adm (CJA-AAS)	X	X
Criminal Justice Administration		X
Early Childhood Education(ECE)		X
Education (EDUA - AA)		X
Entrepreneurship and Small Business (ENBD)	X	X
General Studies (GSAA)		X
Human Resource Management (HMN)	X	X
Human Resource Management Certificate	X	X
Liberal Arts (LIBA - AA)		X
Medical Assistant Certificate		X
Psychology (PSYS)		X
Special Education (AA) EDSA		X

**80% or more - Program and course content is offered fully online and through remote learning; however, there may be an in-person laboratory or fieldwork requirement that must be completed per course requirements. Please see course descriptions. Instructors are prepared to discuss alternate arrangements for students who need accommodations. Online education occurs while the instructor and student are separated by time, distance or both (synchronous or asynchronous).*

The main differences between online education courses and on-campus courses are location and delivery method . The quality and content of online education courses are identical to courses taught on campus in the classroom, and the courses typically transfer identically as on-campus classes. Online education faculty teaching theses courses are the same faculty who teach on campus and offer the same quality and direction as that provided in the classroom. Tuition and fees for online education courses are the same as for on-campus LCCC courses. The courses appear on transcripts as sections of regular LCCC courses.

Admission and registration procedures for these courses are the same as for on-campus courses. Applicants submit an application for admission to Registration/Student Records, meet the standard entrance requirements of the college, and must be formally admitted to the college to register for any credit courses. Online education courses are offered as either hybrid, online or remote courses.

Each type of course provides different advantages and requires different technology and study skills. Online education requires students to be self-directed, independent learners. LCCC's faculty are available for personal appointments, telephone contact, email communication or online chats. For online classes, students may work at the time and day most convenient for them, they must still meet deadlines and participation requirements. For hybrid and remote classes, there will be specified meeting days and times. Although students may work at the time of day most convenient for them, they must still meet deadlines and participation requirements.

College-Wide Competencies

It is fundamental that students be competent within their specific academic discipline. In addition to program specific competencies, all students earning an associate degree will acquire skills and competencies that are integrated throughout the curriculum and student life. Specifically, students will develop an ability to do the following:

THINK CRITICALLY
Students will be able to objectively analyze problems or issues, make adjustments to their thinking, and present effective explanations or solutions.
COMMUNICATE EFFECTIVELY
Students will be able to demonstrate the expressive and receptive abilities to appropriately perceive ideas and information using a variety of modalities (oral/written, verbal/nonverbal).
APPLY QUANTITATIVE REASONING
Students will be able to analyze data, apply mathematical techniques, formulate, translate and solve equations, and draw conclusions in solving real-world problems.
PARTICIPATE COOPERATIVELY WITHIN A TEAM
Students will be able to collaborate on in-class, out-of-class or virtual group projects or lab assignments to promote positive and respectful relationships while accomplishing work tasks in a variety of modalities. Cooperative participation involves communicating effectively, respecting other group members' ideas and contributions, and meeting/exceeding one's own contributory responsibilities.
USE CURRENT TECHNOLOGY EFFECTIVELY
Students will be able to select, use and integrate those technologies that will have the most significant impact on their learning, productivity and performance.
APPLY INFORMATION LITERACY SKILLS
Students will be able to access, evaluate and use information effectively and ethically to meet lifelong professional and personal needs.
ANALYZE HUMAN DIVERSITY
Students will learn about people, groups or societies different from their own. Students will recognize how race, ethnicity, color, gender, gender identity, gender expression, sex, religion, ancestry, national origin, age, disability, sexual orientation, veteran or military status, genetic information, family or marital status, socio-economic status or any other protected class under applicable local, state or federal law affects a person's life experience.
APPLY SCIENTIFIC REASONING
Students will utilize empirically verifiable observations, repeatable experiments/testable hypotheses to explain natural phenomena.
EVALUATE ETHICAL ASPECTS OF DECISION MAKING
Students will be able to evaluate the legal and humanistic consequences of decision-making. It is the college's belief that in acquiring these competencies students will develop confidence in their academic potential and recognize their own strengths and limitations.

Admissions

Admission Policy

In keeping with its mission and goals, the college offers admission to anyone who wishes to further his or her education and can benefit from such an experience. The college views enrollment as a process to assist students in continuing their education to achieve personal and career goals. Admission is not viewed as a process that uses traditional examinations and entrance requirements to reject those who wish to learn. The college considers learning to be a lifelong process and recognizes each individual's previous experiences as valuable and important in future educational planning.

Lehigh Carbon Community College is committed to providing an atmosphere that encourages learning, the exchange of ideas and interacting with one another in a safe environment. The College reserves the right to deny or to place conditions on a student's general admission or re-enrollment of an applicant or former students if the college determines such person represents a safety risk to persons or property at the college. Such person shall have the right to appeal decisions under this policy in writing addressed to the Executive Director of Enrollment within ten calendar days of the date the denial or conditions on admission notice was issued.

Application Process

Applicants must complete and submit the LCCC Application for Admissions, located on the college's website. Paper applications can be obtained from the Office of Registration and Student Records.

All applicants are encouraged to submit a high school transcript or verification of an equivalency diploma—Test of General Education Development (GED). These documents are required of applicants requesting financial aid as well as applicants to the following programs of study: Early Childhood Education(ECE), Health Science (HSCS), Paralegal Studies (PLG-AAS), Professional Pilot (AVP), and Veterinary Technician (VET). (See "Special Admission Program Requirements.")

High School Students

High school students may have the opportunity to enroll in LCCC credit courses. LCCC offers both Dual Enrollment courses and an Early College program. In the Dual Enrollment program, students earn transferable college credits and may be able to use these credits towards high school graduation. In the Early College program, students also earn transferable college credits, meet high school graduation requirements and graduate with an associate degree.

High school students that are in 9th grade, 14 years or older can apply to LCCC as early admissions or dual enrollment. Students younger than 14 will need to contact Admissions at 610-799-1575 to set up an interview and provide supporting documentation. For Early College, please contact your high school counselor for admissions requirements.

Registration / Student Records

Academic Calendar

The academic calendar includes a fall semester and a spring semester. These semesters are 14 weeks of instruction and one week of final examinations. There are several parts-of-term within the regular semester that contain the same number of instructional hours as a full semester. The college offers summer semesters which consists of one 10-week session and two five-week sessions. The college offers a five-week winter session.

Academic Load

The course load for full-time students at LCCC is typically 15 to 18 credits per semester as prescribed by the curriculum. With the approval of an Academic Advisor, students in good academic standing may register for more than 18 credits.

Full-Time Enrollment

Full-time enrollment is defined as at least 12 credits per semester. The program listings in this catalog are intended to present the required courses for the degree or certificate and to serve as a guide outlining appropriate combinations of courses by semester. In many programs, especially in the technologies and health care sciences, courses are arranged in a chronological sequence in which first semester courses are prerequisites to the next semester. To complete the minimum degree requirements of 60 credits in four semesters, 15 credits must be completed each semester, unless additional courses are taken in summer or winter session. When students are required to complete developmental or remedial coursework, these courses must be completed in addition to the 60-credit minimum.

Part-Time Enrollment

Part-time enrollment is defined as less than 12 credits. The catalog organizes most programs of study in semester sequence, as stated previously, to present the required courses for the degree or certificate in a convenient way and to show prerequisite sequences. The part-time student should use the program of study listed in the catalog as a reference for degree requirements and recommended course sequences but not as a time frame for completion.

Registration

Each semester students are required to register for a planned program of courses selected with the recommended assistance of an academic advisor. Students must execute the forms needed for information purposes and pay tuition and fees.
Currently enrolled students may register online and will be notified of the procedures and dates for registration through the college (myLCCC) email system.
Students are responsible for making certain that they have met all prerequisites for a course prior to enrollment in it. This includes specific course prerequisites as well as knowledge that is generally expected for college-level study, such as MLA writing style, academic honesty, etc. Students are strongly encouraged to review the college catalog, course descriptions and academic policies prior to enrollment, and to consult an academic advisor to discuss any questions.

Change in Course Registration

Once registered for a program of courses, a student is expected to attend classes according to the schedule assigned. If a student finds it necessary to drop a course, add a course or change from one course or section to another, the “drop/add form” must be completed and submitted to Registration/Student Records. Failure to do so may result in failing grades or loss of credit. Drop/add forms are available on the college website at www.lccc.edu or in the Office of Registration/Student Records.
A student may add or change from one course to another only during the add/drop period. For exact dates, reference the refund and withdrawal schedule posted on www.lccc.edu.
Refer to the grading policy section for regulations dealing with the dropping of courses.

Change of Address

An address change should be filed as soon as possible with the Business Office by completing “Change of Information” and “Statement of Residency” forms.

Change of Major

For a change of major to be effective during the current semester, you must submit the request before the semester's deadline date. Change of Major dates for each semester can be found below. Refer to the Withdrawal and Refund Dates for the exact part of term end date. Any change received after the deadline date will be effective the following semester.

SEMESTER	OPENING DATE	DEADLINE DATE
Fall	Opening Date for Fall Registration	End of 1st 7 Week Classes
Winter	Opening Date for Winter Registration	Last Day of Classes
Spring	Opening Date for Spring Registration	End of 1st 7 Week Classes
Summer	Opening Date for Summer Registration	End of 1st 5 Week Classes

Undecided Student

New students who are exploring majors have the option of enrolling as an Undecided student. Thereafter, these students will work with designated advisors to explore their interests and skills and determine the most appropriate program of study. Undecided students must declare a program of study by the time they complete 30 college-level credits.

Testing and Placement

The purpose of skills assessment testing is to ensure that students are placed in courses best suited to their current academic abilities.

- Students who are English learners must take the ESL placement test.

- All students admitted to Lehigh Carbon Community College are required to complete the college skills assessment. Students may be eligible for testing exemptions based on high school or college work. For a complete list of exemptions, please visit our website at https://www.lccc.edu/current-students/testing-center/exemptions/. High school or college transcripts are required for exemptions. Students must complete the assessment prior to registering for any class.
- Skills assessment scores will be valid for a period of five years from the date that the test was completed.
- Students who wish to appeal any assessment or placement decision imposed by these policies may do so by contacting the appropriate Academic Dean.
- Additional assessment tools are required for placement in the following subject areas: biology, chemistry and typing. Students with previous educational or work experience should complete the appropriate assessments for correct course placement. A typing placement test is available for advanced placement but is not required.
  NOTE: Students requiring developmental courses should take them in their first semester.

Senior Citizen Enrollment

Students over the age of sixty (60) years residing in the college-sponsor school districts are eligible for free tuition in credit and non-credit courses on a space available basis as of the day the course begins. Senior citizen student will pay all course fees or costs such as laboratory fees and out-of-pocket course costs incurred and paid for by the college such as for third party services provided, including, but not limited to, truck driving certifications shall be paid for by the senior citizen student. Senior Citizens who are eligible for Veterans education benefits may choose to use their preferential course scheduling privileges to register prior to the day the course begins to guarantee their seat at a sponsor rate. If they choose to do so, the student is responsible for all tuition and fees associated with the course.

Eligibility requirements:

1. Students must provide proof of age through their Medicare card, birth certificate or other official document.
2. The requested course must have sufficient enrollment of regular students to justify offering it to senior citizens.
3. The enrollment of senior citizens must not cause the class size to exceed college enrollment limitations.
4. Partnership courses are excluded. Other courses may be excluded as designated by the college.
   If the enrollment totals cause a senior citizen to be ineligible, attempts to find an open section or other alternative shall then be made.

Auditing a Course

Students enrolling in a course as auditors, affording neither credit nor grade, are expected to attend all classes except as arranged by prior agreement with the instructor concerned.
The regular tuition and fee schedules are applicable to audited courses. In order to audit a course, the student must have the required prerequisite/corequisite courses.
A grade of "L" (Listener) will be recorded on the student's transcript unless the instructor is not satisfied with the student's attendance, in which case a "W" will be assigned.
Students may change from credit to audit or audit to credit during the first three weeks of class only.

Class Cancellation

Minimum enrollment is required for a class to be held. The college is committed to keeping tuition as low as possible. To achieve that goal, the college must cancel courses with low enrollments. LCCC realizes that canceling a class is inconvenient for affected students.

Withdrawal from College

To withdraw from all classes, students must complete an "Add/Drop/Total Withdrawal Form." For academic and financial purposes, the effective date of the withdrawal shall, if approved, be the date of receipt of this form.
Student-initiated withdrawals from a class must be processed at the Office of Registration/Student Records by the 10th week. For exact withdrawal dates, reference the refund and withdrawal schedule posted on lccc.edu.
Students enrolled under any program from which financial aid is derived are responsible for informing the Office of Financial Aid, government agency or benefactor. Failure to follow the official withdrawal procedure may result in the recording of failing grades. College equipment and library books must be returned before the withdrawal is considered complete.

Withdrawal for Medical/Mental Health Reasons

LCCC students may apply to withdraw from courses for medical or mental health reasons. Failure to officially withdraw may result in the recording of failing grades. Students seeking to withdraw due to medical or mental health reasons must withdraw from all registered courses.
There are rare occasions when it is appropriate for students to receive a medical withdrawal for one or two courses (ex. a physical injury that prevents the individual from participating in a course that requires physical activity). Such exceptions will be considered on an individual basis.
In order for a Medical/Mental Health Withdrawal Request to be considered for a given semester, all required documents must be submitted prior to the start of final examinations week. View the paperwork required here: https://www.lccc.edu/current-students/registration-student-records/policies/withdrawal-for-medical-mental-health-reasons/.
All approved requests will result in the assignment of "W" grades for each course on the student's academic transcript. Please note that "W" grades will not be assigned if the request process is not completed prior to the start of final examinations week.
Students remain fully responsible for College fees, outstanding fines and repayment of financial aid for which they are no longer eligible as mandated by the Federal Government. (See Withdrawal Policy for Students Receiving Financial Aid.) A Tuition Appeal Form will need to be submitted to be eligible for a tuition credit.
Students who withdraw due to medical/mental health reasons will be required to satisfy conditions of medical clearance prior to re-entry.
The complete policy is in the Student Handbook, or can be obtained at https://www.lccc.edu/current-students/registration-student-records/policies/withdrawal-policy-procedures-refunds/.

Military Drop Policy

Students can be ordered to federal active duty under the laws in Title 10 U.S.C., in which "Active Duty" means full-time duty in active military service. Title 10 allows the President of the United States to federalize a state's militia (National Guard) by ordering them to active duty for missions of national defense, national civil unrest or natural disaster. In addition, members of the National Guard can also be activated by the Governor of Pennsylvania under the provisions of Title 32 U.S.C. for state active duty (SAD) orders to assist in state natural disasters, threats to the state's security, or civil unrest.

Whenever a LCCC student (or the student's spouse) serving in the military is called or ordered to active duty, the college will grant the student a military drop from their education without penalty. This policy does NOT pertain to initial active duty training/basic training or scheduled annual trainings.

Incomplete for Military Obligation

- Students can request a temporary grade of "I" (incomplete) dependent how much coursework has been completed.
- Students need to contact professors (as soon as possible) to make arrangements to make up missed classes and complete assignments.
- When the student returns and completes the work within the agreed upon extension deadline, the grade will be replaced as determined by the professor.

Military Drop

Upon presentation to the college deployment or extended training orders, students (or their spouses) who are on military obligation and must drop from a course or from courses shall receive a 100% refund of tuition and fees based on the form of payment method used by the student (cash, scholarship, tuition assistance, and the like).

Without deployment orders, the student must follow standard College drop or withdrawal procedures.

Process to Complete a Military Drop

- You will need to request a drop for military reasons. Students can send an email to registrar@mymail.lccc.edu with their formal request to drop and include a copy of their military orders.
- If you use educational Benefits, please contact the School Certifying Official with your intent to drop.
- Contact the Office of Financial Aid at 610-799-1700 for questions on how your deployment will impact your aid and/or loan repayment.

- **Note:** The Office of Financial Aid and the Bursar's office will automatically be notified when the drop is processed.

Financial Considerations

Students who are on military obligation and who are receiving financial aid should be aware that dropping a course or courses could impact their financial aid status. They are therefore strongly encouraged to consult with the Financial Aid office as well as the School Certifying Official, if utilizing veteran's benefits.

1. Students receive a full tuition and fees refund for those courses that will not be completed due to military obligation. Tuition will be recalculated to include only continued courses.
2. Students will be advised by the Financial Aid Office of actions required to defer loan(s) repayments based on active military duty obligations.
3. Students who are on military obligation and receiving veteran benefits should be aware of the following:
    a. The School Certifying Official (SCO) will notify the Department of Veterans Affairs (VA) of the student's military drop. The reason will be documented as "mitigating circumstances" for students providing documentation of active duty status. Failure to provide notice or documentation may result in the need for you to pay the VA for the cost of any housing or books and supplies already received. It may also result in LCCC repaying the VA for tuition and fees paid on your behalf.
    b. Per Department of Defense policy, any FTA funds associated with a dropped course, must be returned to the Department of Defense.

Registration / Student Records

Graduation Requirements

Selection of courses applicable for graduation requirements is the responsibility of the student. Academic advisors and counselors are available to help students make course selections.
The general graduation requirements are as follows:

1. Students in the A.A., A.S. and A.A.S. degree programs must successfully complete at least 60 credits in an approved program of study, of which 15 credits must be taken at LCCC through course enrollment.
   a. Students in certificate programs must complete an approved program of study of at least 30 credits in courses numbered 101 or higher, of which at least 25% of the credits are taken at LCCC through course enrollment.
   b. Students in diploma programs must complete an approved program of study of at least 9 credits in courses numbered 101 or higher, of which at least 25% of the credits are taken at LCCC through course completion, except where diploma requirement is 100% of the credits are taken at LCCC through course completion.
2. The student must attain at least a 2.0 overall GPA. Courses with "F" grades will not count toward degree requirements.
3. Courses numbered 100 or lower do not count toward graduation requirements.
4. All general education courses must be courses numbered 101 or higher.
5. A course may not be taken to fulfill both a program requirement and an elective in any program of study.
6. Physical education courses may not be repeated for credit.
7. A student who has completed, with at least a "C," MAT 105, MAT 130, MAT 160, MAT 170 or MAT 191 will not receive credit toward graduation if subsequently enrolled in a lower numbered mathematics course from the previous list. Exceptions to this policy can be made only by the Associate Dean of Professional Accreditation and Curriculum.
8. The student must fulfill all financial obligations to the college.
9. A student interested in completing a second associate degree program at LCCC must complete at least 15 additional credits at LCCC beyond those required for the first associate degree.

In most degree, certificate and diploma programs, the courses required for graduation are listed specifically in the program description section of this catalog by title and course number. Other required courses, however, may not be specified by title and course number. These courses are called "electives" and may be unspecified (free electives), distributed among several areas of general education (social science/humanities electives), or limited to specific departments or disciplines (mathematics, science, business, electronics). Faculty may recommend specific courses to fulfill these elective courses. These recommendations may be found in the footnotes following the program description.

The "Course Description" section provides a short description of each course offered by the college. It also provides information on prerequisite and corequisite courses required for enrollment in specific courses. A prerequisite is a course or skill level that must be completed prior to enrollment in a specific course. A corequisite is a requirement that must be satisfied at the same time or before a specific course is taken. Students should consult the course description section of this catalog when choosing elective courses to ensure that all prerequisite and corequisite requirements are fulfilled.

Transfer students should also consult four-year college or university catalogs and transfer guides when choosing elective courses to enhance the transferability of credits.

Dual Associate Degrees

Students may pursue and earn two associate's degrees simultaneously from Lehigh Carbon Community College. Dual associate degrees may be awarded upon completion of the following:

1. Application for dual associate degrees must be submitted after successful completion of 12 college-level credits with a minimum cumulative GPA of 2.0.
2. All requirements are met for each major.
3. Both degrees must be earned and awarded within the same semester. Each degree requires a separate application for graduation.
4. Students must take and earn a minimum of 15 credits from each major at LCCC through course enrollment.
5. A minimum of 15 unique credits not applied to the other major must be taken and earned.
6. Students using financial aid assistance should speak to the Financial Aid Office about their plans for dual associate degrees. Eligibility can change depending on academic progress and grant/loan limitations.
7. A student may not earn an Associate in General Studies and Associate in Liberal Arts at the same time. Student are discouraged from combining either of these with another AA or AS degree.

Additional Associate Degrees

A student may earn multiple Associate Degrees from Lehigh Carbon Community College. Each additional degree will be posted to the student's academic record and the student will receive diplomas for each degree. Students who already possess an associate degree may be awarded an additional degree upon completion of the following:

1. Meeting the general requirements as outlined for all associate degrees in the course catalog.
2. Earning a minimum of 15 credits with courses 101 and above required by the additional degree at Lehigh Carbon Community College, which have not been applied to any previously awarded degree. The 15 additional credits required can be completed before or after awarding of the previous degree.
3. Students must fulfill all prerequisite, general education and major related course requirements for the program as outlined in the course catalog.
4. Students using financial aid assistance should speak to the Financial Aid Office about their plans for a second degree. Eligibility can change depending on academic progress and grant/loan limitations.

Grading

Grade Level Advancement Policy

After successful completion of 30 or more credits, a student is considered a second year student.

Grading System

1. A student who officially withdraws from one or all classes through the 10th week of the semester will receive a grade of "W" (Withdrawal).
2. LCCC uses a plus/minus grading system. Each professor will indicate their specific grading information in the course syllabus. All students not withdrawing officially by the end of week 10 shall be assigned a grade of "A," "A-", "B+," "B," "B-," "C+," "C," "C-," "D," "F," "I" (Incomplete), "L" (Listener), "R" (Released), "W" (Withdrawal) or "Z" (Not Released) by the instructor.
3. All "W" grades require a last date of attendance.
4. A student receiving an "I" grade must fulfill the requirements established by the instructor issuing the grade. An "F" grade is assigned if requirements are not met by the deadline.
5. A student may change from credit to audit or audit to credit only during the first three weeks of class.

Grade appeals must be addressed by the student with the instructor. If the student remains dissatisfied, he or she may file a complaint with the Ombudsman. For further information, please refer to the Rights, Freedoms and Responsibilities of Students Policy in the student handbook.

Final Grades and Transcripts

Students can view final grades and their transcript by accessing Lehigh Carbon Community College's website (www.lccc.edu) then through the portal by logging into "myLCCC" and clicking on Student Resources, My Records.

A student may request an official transcript in the following ways:

1. E-Transcripts: Available 24/7, where you may request your official electronic transcript. A $5.65 fee is charged to the student for each email address where the e-transcript is sent.
2. Log into myLCCC portal and select BannerWeb, click on the Student Self Service, and then click Transcript Request.
3. Submit the "Transcript Request Form".
4. In Person with photo ID (no exceptions).

Incomplete Grade

An "I" grade may be issued only under these general guidelines:

1. "I" grades may be issued to students who have completed 80% of the class and are only missing the last 20% of the course work in the semester/session.
2. Work remaining should not require formal assistance from the instructor; for example, the student should be able to fulfill the outstanding obligations on his or her own.

The student is expected to notify his or her instructor prior to the final examination to explain the reason that additional time is needed to complete the course requirements. An "I" grade must be removed before the end of the ninth week of classes in the next semester or a failing grade will be recorded for the course. An exception will be made if a lab course requires a special set-up.

Report of Grades

Only "D" and "F" grades are reported to students at mid- semester, except for ADN and NUR courses which will also report C and C- grades. Students are urged to discuss their academic progress with all instructors and particularly with those instructors from whom they received unsatisfactory grades. Students who receive more than one failing grade are advised to meet with an academic advisor, counselor or faculty advisor to discuss their academic performance.
The final grade report at the end of the semester is assumed correct as posted unless a question is raised within one year of its recording.

Repeated Courses

A student seeking to take a course three or more times, including withdrawals, will be required to meet with an advisor to develop an individualized success plan. Success plans may include the use of college resources; including, but not limited to: counseling, tutoring, and Success Coaches. Students are encouraged to discuss financial implications of repeating a course with the office of Financial Aid. Only the highest grade earned will be used for calculating the student's grade point average (GPA) and counted towards degree requirements. All instances of repeated courses are displayed on the student's academic transcript.

Quality Points/Grade Point Average

Each final grade used in the calculation of the GPA is assigned a quality point value. The numeric value of the grade (A = 4.0, A- = 3.7, B+ = 3.3, B = 3.0, B- = 2.7, C+ = 2.3, C = 2.0, C- = 1.7, D = 1.0, F = 0.0) is multiplied by the number of credits for the particular course to obtain the quality points earned in that course.
The sum of the quality points of the courses taken is used to calculate an average. The equation used is as follows: **Total Quality Points/Total Credits = GPA**

The final grades used in calculating the GPAs are as follows:
A = 4.0 Quality Points per Credit
A- = 3.7 Quality Points per Credit
B+ = 3.3 Quality Points per Credit
B = 3.0 Quality Points per Credit
B- = 2.7 Quality Points per Credit
C+ = 2.3 Quality Points per Credit
C = 2.0 Quality Points per Credit
C- = 1.7 Quality Points per Credit
D = 1.0 Quality Points per Credit
F = 0.0 Quality Points per Credit

Final grades that have no effect on GPA are as follows:
I - Incomplete
L - Listener (audit)
R - Released (pass)
W - Withdrawal
WA - Administrative Withdrawal
Z - Not Released

Example:

COURSE	CREDITS		GRADE	QUALITY		TOTALPOINTS
ENG 105	3	x	B	3	=	9
HIS 120	3	x	C	2	=	6
MAT 105	3	x	B	3	=	9
BIO 205	4	x	A	4	=	16
ART 101	3	x	A	4	=	12
Totals	**16**					**52**

52/16 = 3.25 Grade Point Average (GPA)

A grade followed by an "H" designates an honors course.
A grade followed by an "R" designates academic restart.
A grade followed by a "^" designates a 090- to 099-level course.
Courses numbered 100 or lower do not count toward graduation requirements.
Repeated Course – An "E" or "I" in the Final Column (R) on the transcript indicates a repeated course. "I" means the grade is included in the GPA calculation, and "E" means the grade is excluded in the GPA calculation. If a student takes a course at LCCC after already receiving transfer credits for that same course, the transfer credits will be excluded and the LCCC credits will be included.
When a student repeats a course, his or her GPA is recalculated based upon his or her highest grade earned in the course. This procedure does not apply when the grade received is a "W."

Registration / Student Records

Academic Policies

Academic Standing and Progress

The college is committed to the academic success of every student. The college will monitor a student's grades and issue an appropriate warning if grades are inadequate. Academic standing is determined by the standards for academic progress listed below.

Eligibility to graduate with a certificate or degree requires a cumulative GPA of at least 2.0 in all coursework applicable to graduation. Courses with "F" grades do not count toward graduation but are used in calculating the GPA.

Note: Exceptions to this policy are noted in the program descriptions within this catalog. Some Health Care Sciences programs require a standard that is higher than 2.0.

Academic Progress Table

ATTEMPTED CREDIT HOURS	DISMISSAL	SUSPENSION	PROBATION	ALERT	GOOD STANDING
1-12				.00-.99	1.00
13-24			.00-.99	1.00-1.49	1.50
24-36		.00-.99	1.00-1.49	1.50-1.74	1.75
37+	.00-.99	1.00-1.49	1.50-1.74	1.75-1.99	2.00

Dean's List

Credit students completing at least six credits may be named to the Dean's List upon achieving passing final grades in all subjects and earning an average of at least 3.5. Students with grades of "F," "I," "W" or "Z" will not be considered for Dean's List, with the exception of those students who withdraw within the first three weeks and are assigned a grade of "W."

Academic Alert

Students who fail to make satisfactory academic progress as defined by the Academic Progress Table will be placed on Academic Alert. Additionally, students who are exhibiting poor academic achievement by receiving an excess of "W," "Z," "F" or "I" grades may be placed on Academic Alert, as determined by the Dean of Academic Support and Success. Students placed on Academic Alert receive a letter from the Dean of Academic Support and Success informing them of their academic standing and suggesting the use of college services to improve academic performance. The student can register for courses without penalty.

Academic Probation

Students who fail to meet satisfactory academic progress as defined by the Academic Progress Table will be placed on Academic Probation with a hold on their account. Additionally, students who are exhibiting poor academic achievement by receiving an excess of "W," "Z," "F" or "I" grades may be placed on Academic Probation, as determined by the Dean of Academic Support and Success. Students placed on Academic Probation receive an email from the Dean of Student Support and Success informing them of their academic standing and the requirements that must be met in order to register for the next semester. The student must complete an academic success plan and return the document to the Dean of Academic Support and Success. Guest students looking to register are exempted from the academic probation hold and may register for courses as long as they meet course co- and prerequisites.

Academic Suspension

Students who fail to make satisfactory progress as defined by the Academic Progress Table will be placed on academic suspension. Additionally, students who are exhibiting poor academic achievement by receiving an excess of "W," "Z," "F" or "I" grades may be placed on Academic Suspension as determined by the Dean of Academic Support and Success. Students placed on Academic Suspension receive a letter from the Dean of Academic Support and Success informing them of their academic standing. Students placed on Academic Suspension will be academically suspended from the college. To continue enrollment, students must participate in the Academic Success Program and must meet with the Dean of Academic Support and Success to establish an academic contract and success plan. Students must meet with an academic advisor to schedule courses, and students are limited to 6 credit hours. The contract may include part-time status, repeating failed courses, enrolling in a study skills course and other requirements deemed necessary for success. This contract remains in place until the students' total GPA rises above the Suspension level from the Academic Progress Table. Students must successfully complete all credits attempted and achieve a semester grade point average of at least a 2.0 to continue enrollment at the college.

Academic Dismissal

Students who fail to make satisfactory academic progress as defined by the Academic Progress Table will be placed on Academic Dismissal. Additionally, students who were not successful in the Academic Suspension program or did not achieve a semester GPA of at least 2.0 after the first semester following one semester of academic suspension will be placed on Academic Dismissal. Students placed on Academic Dismissal will receive a letter from the Dean of Academic Support and Success informing them of their academic standing and dismissal from the college. Students will need to sit out one full academic year (fall and spring semester).

Academic Reinstatement

Students who have been academically dismissed may apply for reinstatement after one year, if they can demonstrate that the circumstances that contributed to their past poor academic performance have been eliminated or managed so as to promote academic success.

The student is required to appear before the Academic Record Review Committee to present the application and the changed circumstances. The student will be notified of the reinstatement hearing date one week after the due dates listed below. The student will be required to complete an Academic Progress course session in CANVAS and meet with an academic advisor to schedule courses, and students are limited to 6 credit hours.

If a student has met the required one year dismissal and has missed the deadline to apply for reinstatement, the Dean of Academic Support and Success will review and meet with the student for reinstatement. The student will be required to complete an Academic Progress course session in CANVAS and meet with an academic advisor to schedule courses, and students are limited to 6-7 credit hours.

Reinstatement Application Process

To apply for reinstatement, the student must submit a completed Application for Academic Reinstatement to the Academic Advising office prior to the following dates:

- June 15 – for fall semester reinstatement
- October 15 – for spring semester reinstatement
- Reinstatement will not be considered for summer sessions.

To apply for reinstatement, follow the steps below:

1. Complete and submit the "Application for Academic Reinstatement" and the "Academic Reinstatement Questionnaire" before the application dates listed above.
2. If you attended another college since you last attended LCCC, indicate such on your application and send your official transcript to the Office of Registration/ Student Records at 4525 Education Park Drive, Schnecksville, PA 18078.
3. If you were dismissed more than one year ago and missed reinstatement deadline, submit your application and contact the Dean of Academic Support and Success.
4. Provide documentation of other activities that demonstrate your readiness to return and succeed at college study (e.g. military service, employment experience, etc.)

The student is required to appear before the Academic Review Committee to present the application and the changed circumstances. The student will be notified of the reinstatement hearing date within 7-10 days of the application, and will be notified of the Committee's decision within 7-10 days following the hearing date.

Repeated Academic Dismissals
Reinstated students who are dismissed a second time may apply for academic reinstatement after two years, if they can demonstrate ability to succeed as indicated above. Reinstated students who are dismissed a third time may not apply for reinstatement at LCCC.

Appeal Process
Students may appeal the reinstatement decision of the Academic Review Committee if they can demonstrate:

1. Procedural error occurred in the interpretation of college regulations that effectively denied the student fair consideration;
2. The decision is held to be arbitrary and capricious.

Appeals must be submitted in writing to the Dean of Academic Support and Success within five days of the student's receipt of the committee's decision. Whenever possible, the Dean will seek the recommendation of alternate committee members. The decision of the Dean is final.

Academic Record Review Committee
This is a group of faculty and administrative staff who convenes prior to the start of each fall and spring academic semester to review academic standing of students and consider students' applications for academic reinstatement.

Academic Restart

The Academic Restart policy only pertains to LCCC GPA and credits. It does not erase the student's complete academic history: the student's transcript will continue to list courses that were previously attempted, but will no longer use them to calculate GPA or to meet degree or program requirements. It also has no effect on a student's financial aid history. In accordance with federal and state student aid regulations, students will not be relieved of academic progress requirements for financial aid eligibility, even if restart approval is granted.

Eligibility criteria:
Students who have not been enrolled at LCCC for a period of at least three (3) consecutive years are eligible for Academic Restart unless they have previously been granted Academic Restart.

Academic Restart Process:

1. Any student interested in beginning this process must first return to LCCC, enrolling in at least 3 credits during their first semester back. Students who have been dismissed from the college for academic reasons must complete the Academic Reinstatement process and be approved for reinstatement to enroll.
2. During the first semester of their return, they must receive a GPA of 2.0 or higher.
3. To complete this process, they must complete and submit the Application for Academic Restart no later than the conclusion of the semester that follows their successful return.

Academic Restart Institutional / Student Expectations
Upon students completing the Academic Restart contact form, an Academic Advisor should contact the student to discuss their questions.
Once an application is received from a student, it should be reviewed and approved by the Dean of Accreditation, Compliance, Curriculum, and Assessment. The form is then given to the Director of Registration and Student Records who reviews the application.
Academic Advising, Success Coaches and Educational Support Services should be notified of the received application so they can provide support to the student throughout the semester. All received Academic Restart applications will be reviewed during end of semester processing.

- Students who have successfully completed 3 credits with a minimum GPA of 2.0 will have their Academic Restart processed by the Director of Registration and Student Records. Students will receive an email once their restart is processed.
- Students who receive all final grades of W or F in their first return semester will need to reapply in a future semester.
- Students who submit applications prior to course enrollment will have their applications held for one academic year, at which point if they have not successfully completed 3 credits, their application will be denied and they will need to reapply in a future semester.

Registration / Student Records

Attendance Policy

Faculty are required to report a student who never began attendance or had academically related activity in their course(s). This is a federal requirement for the college to remain in compliance with Title IV Federal Aid eligibility. Each faculty member is free to establish an attendance policy of his or her own and include it in their course syllabus. Failure to officially withdraw from a course(s) may result in a failing final grade. The college reserves the right to administratively drop or withdraw a student from a course(s). To officially withdraw, a student must submit an Add/Drop/Total Withdrawal form which are available on the myLCCC portal at my.lccc.edu, under the Student Resources tile, select the Forms link.

Absence to Observe Religious Holiday

The observance of a religious holiday will be considered an excused absence from classes, provided that the student notifies their instructors one week in advance of the holiday absence. As with all absences, the student remains responsible for all missed work. For questions or clarifications, please contact the appropriate dean.

Absence to Attend Jury Duty

Absence to attend jury duty will be considered an excused absence provided that the student notifies his or her instructor in advance, provides a copy of the summons, and is responsible for all work missed.

Tuition and Fees

Tuition and Fees

TUITION AND FEES ARE ESTABLISHED BY THE BOARD OF TRUSTEES. TUITION AND FEES LISTED ARE SUBJECT TO CHANGE WITHOUT NOTICE. Tuition and certain fees are based on school district and Pennsylvania residency. The college is sponsored by the nine school districts in Lehigh County and four of the five school districts in Carbon County: Allentown, Catasauqua Area, East Penn, Northern Lehigh, Northwestern Lehigh, Parkland, Salisbury Township, Southern Lehigh, Whitehall Coplay, Jim Thorpe Area, Lehighton, Palmerton Area and Panther Valley.

As part of the application process, students provide the college with residency information. Each school district is responsible for determining whether students are residents of the district and whether to sponsor them resident tuition. Residency requirements vary among the sponsoring school districts. Students should be familiar with the residency requirements of their school district. For information concerning residency requirements, contact the Business Office at 610-799-1157.

Tuition and Basic Fees

(Refundable in accordance with the College Refund Policy)

FALL 2024	SPONSORING DISTRICT OF LCCC	OTHER PA RESIDENT	NONRESIDENT OF PENNSYLVANIA / INTERNATIONAL STUDENT	RESIDENT OF SCHUYLKILL COUNTY
FULL-TIME TUITION (12-18 CREDITS PER SEMESTER)	$1,875.00	$3,750.00	$5,625.00	$2,812.50
CAPITAL OUTLAY FEE	-	$135.00	$270.00	$135.00
COMPREHENSIVE FEE	$360.00	$360.00	$360.00	$360.00
TECHNOLOGY FEE	$405.00	$405.00	$405.00	$405.00
TOTAL FULL-TIME TUITION AND FEES	**$2,640.00**	**$4,650.00**	**$6,660.00**	**$3,712.50**
LCCC TEXTBOOK+ FEE (PER CREDIT)	$30.00 per credit	$30.00 per credit	$30.00 per credit	$30.00 per credit
PART-TIME TUITION (1-11 CREDITS PER SEMESTER OR CREDITS IN EXCESS OF 18 PER SEMESTER)	$135.00 per credit	$270.00 per credit	$405.00 per credit	$202.50 per credit
CAPITAL OUTLAY FEE	-	$9.00 per credit	$18.00 per credit	$9.00 per credit
COMPREHENSIVE FEE	$24.00 per credit	$24.00 per credit	$24.00 per credit	$24.00 per credit
TECHNOLOGY FEE	$27.00 per credit	$27.00 per credit	$27.00 per credit	$27.00 per credit
TOTAL PART-TIME TUITION AND FEES	**$186.00 per credit**	**$330.00 per credit**	**$474.00 per credit**	**$262.50 per credit**
LCCC TEXTBOOK+ FEE (PER CREDIT)	$30.00 per credit	$30.00 per credit	$30.00 per credit	$30.00 per credit
* Veterans and military students will be charged sponsored rates. Tamaqua Area High School and Marian Catholic High School graduates will be charged sponsored rates				

Dual Enrollment and Early College

DUAL ENROLLMENT (SPONSORED SCHOOL DISTRICT)	$30.00 per credit taught by sponsor instructor	$70.00 per credit taught by College instructor
DUAL ENROLLMENT (NON-SPONSORED SCHOOL DISTRICT)	$96.00 per credit taught by sponsor instructor	$111.00 per credit taught by College instructor
EARLY COLLEGE (SPONSORED SCHOOL DISTRICT)	-	$70.00 per credit taught by College instructor

Tamaqua Area High School and Marian Catholic High School students will be charged sponsored rates.

Senior Citizen Tuition and Fees

Students over the age of 60 years residing in college-sponsored school districts are eligible for free tuition in a credit course on a space available basis as of the day the course begins. Senior citizen students will pay all course fees or costs such as laboratory fees and out-of-pocket course costs incurred and paid for by the college such as for third party services, including but not limited to truck driving certifications. Senior Citizens who are eligible for Veteran education benefits may choose to use their preferential course scheduling privileges to register prior to the day the course begins to guarantee their seat at the sponsor rate. If they choose to do so, the student is responsible for all tuition and fees associated with the course.

Other Fees (non-refundable)

- Bad Check Fee: $30.00
- Cougar Payment Plan Fee: $25/35.00
- Cougar Payment Plan Late Fee: $25.00
- ID Replacement Fee: $5.00
- Late Registration Fee: $5.00

- Prior Learning Assessment Fee: $125.00
- Tutoring Fee: $5.00

Course Fees

Additional fees will apply to other select classes. Course fees are established to recover the costs directly associated with a particular course. Course fees will be assessed following the Course Fees Schedule.

Collection Process

Effective July 1, 2024, Lehigh Carbon Community College will release all transcripts (official and unofficial) regardless of students having an outstanding financial balance with the institution.

There will continue to be holds on student records that may prevent students from registering for classes, viewing their grades, and/or receiving their diplomas. Lehigh Carbon Community College utilizes a standard collection process. Delinquent accounts will be sent to a third party in which the third party will impose collection fees. Collection fees are calculated at the maximum amount permitted by applicable law, not to exceed 33.3% of the amount outstanding. Delinquent accounts may be reported to one or more of the national credit bureaus.

Academic Debt Relief Policy

The 'Academic Debt Relief' policy enables students with outstanding balances from prior semesters to enroll in future semesters with the outstanding debt forgiven if certain criteria are met. After review, approval and successful completion of the criteria in the policy, the student's prior semesters' debt will be removed from LCCC's collection agency's list and the debt will be waived. Forms are available from the Business Office, Registration/Student Records, or the Financial Aid Office.

Tuition Financial Obligation

College Refund Policy

Tuition is based upon liable credit hours. The refund period is equal to 1/15 of a scheduled class. The information that follows details the financial obligation of the student based on what refund period the class withdrawal occurs.

- Before and during the first refund period of classes - 0% credit hour liability (no tuition is owed)
- Within the second refund period of classes - 50% credit hours liability (must pay 50% of tuition charge).
- Within the third refund period of classes - 75% credit hour liability (must pay 75% of tuition charge).
- After third week of regularly scheduled classes - 100% credit hour liability (must pay all tuition charges).

Fee Refunds

Please refer to academic calendar for semester start dates.

- Before the start of the semester - 100% refundable
- Within the first refund period of classes - 100% refundable, less a $100 service fee.
- Within the second refund period of classes - 50% fee liability (must pay 50% of fees charged).
- Within the third refund period of classes - 75% fee liability (must pay 75% of fees charged).
- After third week of regularly scheduled classes - 100% fee liability (must pay all fees charged).

Actual refund period (liability) dates are listed on the college website: www.lccc.edu.

The date of official withdrawal is the date when the properly completed forms are in the possession of the Office of Registration/Student Records. In the event the college cancels the class for lack of sufficient enrollment or the college cancelled the student's registration prior to the start of classes, all tuition and fees listed under letters A through D of the Tuition and Fees section, and course fees will be refunded.

Aviation program students receiving V/A benefits will not be refunded any monies paid by the V/A toward their tuition and fees or flight costs.

Payment received from any other source will be subject to the refund policy of that organization.

Cougar Payment Plan

An enrollment fee of $25/$35 per semester provides students with the option to stretch tuition payments into multiple installments. To enroll in the Cougar Payment plan, go to "myLCCC," then click on "BannerWeb, Bannerweb, Student, Credit Card/ACH Payment/Cougar Payment Plan, LCCC Account Suite, Payment Plans."

Tuition and Fees

Art Course Fees

Course Fees: Art

- All Art course fees are based on the materials needed per individual
- ART-CIS 109, 128, 132, 226, 246, 247, 248, 249, 251, 258: **$20.00 each**
- ART 260 (Independent Study): **$20.00**
- ART 260 (Photography, Jewelry, Ceramics, Metalsmithing, CG): **$50.00 each**
- ART 112, 125, 130, 135, 155, 205, 206, 225, 230: **$40.00 each**
- ART 120, 140, 220, 235, 240: **$55.00 each**

Tuition and Fees

Aviation Course Fees

Course Fees: Aviation

- ASA 111, 112, 121, 122, 211, 212, 221, 230, 231: **$100.00 per hour**

Aviation Lab Fees

1. Lab fees may not be enough to complete the certificate or training sought; occurrences happen when the student may have to identify additional sources of funding.

2. Payment of the flight lab fee, which is due in full at the start of the semester, does not guarantee meeting the requirements necessary for successfully earning an FAA certificate or rating. Attaining an FAA pilot certificate or rating is based upon the demonstration of aeronautical knowledge and flight proficiency to FAA standards during the FAA check ride.

3. Two failures of the same flight theory or flight practical course will result in the student being removed from further advancement within the degree program.

4. Due to the possibility of changing aviation fuel prices during the year, it is possible the flight lab fees may change as a result of a fuel surcharge.

5. Completion of the aviation degree programs within 24 calendar months is dependent upon pilot aptitude, timely completion of the flight courses, and the financial resources to complete the flight courses without interruption.

FLIGHT OPERATIONS – LAB FEES ***PRIVATE PILOT CERTIFICATE PROGRAM (ASA 112)**	**HOURS REQUIRED**	**HOURLY RATE**	**TOTAL COST**
Dual Instruction (aircraft)	30.0 hours	$ 265	$ 7,950
Solo (aircraft)	12.0 hours	$ 215	$ 2,580
Instruction (brief/de-brief)	10.5 hours	$ 50	$ 525
Checkride (aircraft)	2.0 hours	$ 215	$ 430
	ASA 112 Lab Fee:		**$ 11,485**
***Instrument Rating Program (ASA 122)**			
Dual Instruction (aircraft)	42.0 hours	$ 265	$ 11,130
Instruction (brief/de-brief)	10.5 hours	$ 50	$ 525
Checkride (aircraft)	2.0 hours	$ 215	$ 430
	ASA 122 Lab Fee:		**$ 12,085**
***Commercial Pilot Certificate Program (ASA 212)**			
Dual Instruction (aircraft)	13.0 hours	$ 265	$ 3,445
Solo (aircraft)	40.0 hours	$ 215	$ 8,600
Instruction (brief/de-brief)	10.0 hours	$ 50	$ 500
	ASA 212 Lab Fee:		**$ 12,545**
***Commercial Pilot Certificate Program (ASA 214)**			
Dual Instruction (aircraft)	27.0 hours	$ 265	$ 7,155
Dual Instruction (complex or TAA)	15.0 hours	$ 350	$ 5,250
Solo (aircraft)	25.0 hours	$ 215	$ 5,375
Instruction (brief/de-brief)	10.0 hours	$ 50	$ 500
Checkride (SE aircraft)	2.0 hours	$ 215	$ 430
	ASA 214 Lab Fee:		**$ 18,710**
***Commercial Pilot Certificate – Multi-Engine Add-On (ASA 223)**			
Dual Instruction (multi-engine)	15.0 hours	$ 485	$ 7,275
Dual Instruction (AATD)	3.0 hours	$ 100	$ 300
Instruction (brief/de-brief)	10 hours	$ 50	$ 500
Checkride (ME aircraft)	2.0 hours	$ 435	$ 870
	ASA 223 Lab Fee:		**$ 8,945**
***Certified Flight Instructor Program (ASA 231)**			
Dual Instruction (aircraft)	25.0 hours	$ 265	$ 6,625
Instruction (brief/de-brief)	6.0 hours	$ 50	$ 300
Checkride	2.0 hours	$ 215	$ 430
	ASA 231 Lab Fee:		**$ 7,355**

Estimated Total Flight Training Costs to Meet Degree Requirements: $62,180
(Private, Instrument, Commercial ASEL & CFI)
***Note: These courses do not guarantee a certificate or rating.**

AIRCRAFT RENTAL RATES**	
2-seat Single-Engine Aircraft	$185/hour
2-seat Single-Engine Aircraft with GPS	$190/hour
4-seat Single-Engine Aircraft	$210/hour
4-seat Single-Engine Aircraft with GPS	$215/hour
Complex Aircraft	$300/hour
Technologically Advanced Aircraft (TAA)	$300/hour
Multi-Engine Aircraft	$435/hour
FLIGHT TRAINING DEVICES	
2-seat Single-Engine Aircraft	$185/hour
2-seat Single-Engine Aircraft with GPS	$190/hour
4-seat Single-Engine Aircraft	$210/hour
4-seat Single-Engine Aircraft with GPS	$215/hour
Complex Aircraft	$300/hour
Technologically Advanced Aircraft (TAA)	$300/hour
Multi-Engine Aircraft	$435/hour

****Additional hourly fuel surcharges may apply to aircraft rental rates.**

Tuition and Fees

Computer Science Course Fees

Course Fees: Computer Science

- CFS 155, 206: **$35.00 each**
  Entry to National Cyber League Competition
- NET 109, 110, 111, 113, 121, 136, 151, 161, 171, 210, 220, 225, 230, 235, 236, 237, 240, 241, 242, 265, 280: **$75.00 each**
  Access to Azure Cloud Platform

Tuition and Fees

Criminal Justice Course Fees

Course Fees: Criminal Justice

- CJA 215: **$15.00**

Tuition and Fees

Education Course Fees

Course Fees: Education

- ECE 110, 120, 125, 130, 140, 205, 210, 215, 218, 225, 230, 235: **$30.00 each**
- ECI 240: **$35.00**
- EDU 101, 105, 114, 115, 120, 125, 202, 210, 240, 260, 291: **$30.00 each**
- SED 200, 205, 220: **$30.00 each**

Tuition and Fees

Engineering Technology Course Fees

Course Fees: Electronics

- ELE 120, 130, 210: **$30.00 each**
- ELE 175, 235: **$50.00 each**
- ELE 165, 255, 275: **$75.00 each**
- Electronics components and breadboard supplies

Course Fees: Mechanical Technology

- BGT 240: **$150.00**
- MET 115: **$25.00**
- MTD 206: **$100.00**
- Components and materials needed for course projects

Tuition and Fees

HVACR Course Fees

Course Fees: Heating, Air Conditioning, and Refrigeration

- HAC 104: **$20.00**
  Certification fee for NFPA 70E Electrical Safety (360Training)

- HAC 135: **$20.00**
  Certification fee for Oil Burner Employment Ready (ESCO)
- HAC 125: **$100.00**
  Materials required for course and certification fee (Hydronic Employment Ready - ESCO)
- HAC 131: **$30.00**
  Certification fee for EPA 608 Refrigerant Handling (ESCO)
- HAC 132: **$30.00**
  Certification fee for Hydrocarbon Refrigerant Safety (ESCO)
- HAC 160: **$50.00**
  Certification fee for NFPA 70E Electrical Safety (360Training)
- HAC 204: **$50.00**
  Certification Fee for Gas Heat Employment Safety (ESCO)

Tuition and Fees

Kitchen and Bath Design Course Fees

Course Fees: Kitchen and Bath Design

- KBD 103: **$150.00**
- KBD 203: **$300.00**
  Materials used in the building process shared across each student

Tuition and Fees

Medical Assistant Course Fees

Course Fees: Medical Assistant

- MED 213: **$155.00**
  Fee for CMA Examination

Tuition and Fees

Nursing Course Fees

Course Fees: Nursing - RN Program

- ADN 150, 160, 205, 215, 225, 235: **$611.17 each**
- ADN 173: **$1,222.34**
  Fee covers the ATI Complete Program: Engage Series (interactive textbook, content, and testing product)

Course Fees: Nursing - Practical Nursing Program

- NUR 106, 116, 126: **$778.33 each**
  Fee covers the ATI Complete Program: Engage Series (interactive textbook, content, and testing product)

Tuition and Fees

Paralegal Course Fees

Course Fees: Paralegal

- PLG 120, 200, 245, 255, 277: **$30.00 each**
  Access to Legal Databases and Billing Software

Tuition and Fees

Science Labs Course Fees

Course Fees: Science Labs

- BIO 111L: **$11.00**
  Lab supplies
- PHY 101: **$110.00**
  Lab supplies

Tuition and Fees

Veterinary Technician Course Fees

Course Fees: Veterinary Technician

- VET 101, 120, 125, 228: **$15.00 each**
  Laboratory materials
- VET 210: **$85.00**

Laboratory materials and malpractice licensing
- VET 220, 225: **$50.00 each**
  Laboratory materials and malpractice licensing
- VET 230: **$70.00**
  Laboratory materials and malpractice licensing
- VET 223, 230
  Radiation Badge Fee: **$40.00**

Additional fees will apply to all students in the Veterinary Technician program.

Tuition and Fees

SEED Program Fees

Program Fees: SEED Program

Fees will range from **$3,250 - $6,500** based upon the number of support hours a student will need to have access and success in meeting the academic and independent living goals they have established for themselves. The fees are associated with academic/career coaching, personalized instruction, job support/training, and individualized meetings for skill development and problem-solving. Support is also provided in social groups, professional/peer mentors, and a structured study lounge. These services are provided 2 to 4 days (5-18 hours) per week depending upon the support structure selected. This fee is on top of the tuition and college fees associated with courses taken.

Financial Aid

Definition of an Academic Year

An academic calendar year is defined as the fall semester and the spring semester. For full-time students receiving all forms of financial aid, the academic year includes a minimum of 24 credits, with 14 weeks of instruction and one week of final examinations each semester. There are several shorter parts-of-term within the regular semester that contain the same number of instructional hours as a full semester. The college offers summer semesters including one 10-week session and two five-week sessions.

College Code

The federal college code for Lehigh Carbon Community College is **006810**.

Code of Conduct

1. The institution will not enter into any revenue-sharing arrangement with any lender.
2. No officer or employee of the institution who is employed in the financial aid office of the institution or who otherwise has responsibilities with respect to education loans, or agent who has responsibilities with respect to education loans, will solicit or accept any gift from a lender, guarantor or servicer of education loans.
3. An officer or employee who is employed in the financial aid office of the institution or who otherwise has responsibilities with respect to education loans, or any agent who has responsibilities with respect to education loans, will not accept from any lender or affiliate of any lender any fee, payment or other financial benefit (including the opportunity to purchase stock) as compensation for any type of consulting arrangement or other contract to provide services to a lender or on behalf of a lender relating to education loans.
4. The institution shall not request or accept from any lender any offer of funds to be used for private education loans (as defined in section 140 of the Truth in Lending Act) including funds for an opportunity pool loan, to students in exchange for the institution providing concessions or promises regarding providing the lender with:
   a. a specified number of loans made, insured or guaranteed under this title;
   b. a specified loan volume of such loans; or
   c. a preferred lender arrangement for such loans.
5. The institution will not request or accept from any lender any assistance with call center staffing or financial aid office staffing.
6. Any employee who is employed in the financial aid office of the institution, or who otherwise has responsibilities with respect to education loans or other student financial aid of the institution, and who serves on an advisory board, commission or group established by a lender, guarantor or group of lenders or guarantors, shall be prohibited from receiving anything of value from the lender, guarantor or group of lenders or guarantors, except that the employee may be reimbursed for reasonable expenses incurred in servicing on such advisory board, commission or group.

Financial Aid Requirements

To assist qualified degree-seeking students with meeting the cost of education, Lehigh Carbon Community
College administers various federal, state and institutional financial aid funds. Grants and scholarships, which do not require repayment, as well as loans and student employment programs, are available through the Office of Financial Aid. Financial aid is intended to supplement the financial resources of the student and his or her family.

To be eligible for financial aid, the student must:

- be enrolled as a matriculated student in an eligible program of study, for example seeking a degree/ certificate;
- be a U.S. citizen or an eligible non-citizen;
  have a high school diploma or its equivalent;
- not be in default on any Title IV loan or owe repayment on any Title IV grant;
- not exceed annual or aggregate loan limits in Title IV programs;
- agree to use any Title IV aid received solely for educational purposes;
- not be a prisoner in a state or federal facility;
- have a valid Social Security number; and
- maintain satisfactory academic progress.

To qualify for financial aid, the Free Application for Federal Student Aid (FAFSA) must be completed online at studentaid.gov. New applicants and one parent (applicable if the student is a dependent student) must create a FSA ID at studentaid.gov/fsa-id in order to log into certain U.S. Department of Education websites and electronically sign the Free Application for Federal Student Aid (FAFSA).

Create a FSA ID as soon as possible and at least three days BEFORE filing the FAFSA. You are able to immediately use your FSA ID to sign an original FAFSA. Once the Social Security Administration verifies your information in 1-3 days, you will be able to make changes to an existing FAFSA and log into U.S. Department of Education websites. Continuing students who wish to reapply for financial aid must also create a FSA ID if they have not already done so at fsaid.ed.gov. Once the Social Security Administration verifies your information in 1-3 days, you will be able to start a renewal FAFSA. Students should complete the FAFSA by the preceding May 1 for attendance during the fall and spring semesters, by the preceding October 1 for attendance during the spring semester and by the preceding March 1 for attendance during the summer semester. Students will receive an email notification that his/her Student Aid Report (SAR) results are available online as long as the student provided a valid email address when the FAFSA was filed. The student will receive a SAR acknowledgement by U.S. mail if they did not provide an email address or provided an invalid email address. The SAR is a recap of the information submitted on the original FAFSA form. Comments found in Part 1 of the SAR should be read carefully. If the application has been selected for verification, it will be noted in Part 1 of the SAR.

Verification

After students submit the FAFSA to the federal processor, their record may be randomly selected for a process called verification. A school must verify all applications selected by the federal processor. LCCC is required to collect and verify the following information from those applicants whose applications were selected for verification:

- Household size
- Number in college
- Adjusted gross income (AGI)
- U.S. taxes paid
- Identity and Statement of Educational Purpose

The documents required to complete the verification process are: Signed parent and student income tax return or IRS tax transcript from two years prior to the current year and dependent or independent verification form (which is available on LCCC's website under Financial Aid, Deadline, Codes and Forms). The verification form must be printed, completed and signed and submitted to the Office of Financial Aid.

Other documents as required based on the results of filing the FAFSA.

An application selected for verification cannot be finalized until all documentation is received and the verification process is complete. The student must respond to the Office of Financial Aid's request for verification documentation in 10 days. The verification process should take approximately four weeks before the student is informed of his/her financial aid eligibility.

Financial Aid Eligibility and Bannerweb

All awards are determined and finalized by the Office of Financial Aid. Students are able to view their award eligibility by logging into "myLCCC" portal on the LCCC web page at www.lccc.edu using their L number and password. Locate "Student Resources" on the left-hand side. Locate "Financial Aid" and click. Select "Award" and click. Select "Award by Aid Year" and click and then select the appropriate aid year (for example: 2023- 2024 academic year) and submit. Select the Resources/ Additional Information tab and answer the questions Yes or No. Select the "Accept by Aid Year" tab. If LCCC needs documents or information from the student, they will be listed here. Once your financial file is complete a listing of fund types and dollar amount are listed here. Loans are listed as estimated and a decision will need to be made to accept or decline any loans offered to the student. New requirements will appear once loans are accepted.

Financial Aid Communications

New students to LCCC, after submitting an application for admission, can expect to receive within 48 hours an LCCC ID number and an LCCC email account. LCCC email accounts are available for all registered and admitted students.
The college-assigned student email account shall be Lehigh Carbon Community College's official means of communication with all LCCC students who receive financial aid. The college reserves the right to send official communications to students by email with the full expectation that students will receive and read these emails in a timely manner.
The emails will direct students to the financial aid section on the LCCC portal from myLCCC's home page (www.lccc.edu). Please see Financial Aid Eligibility and Bannerweb above for additional instructions.
Students are expected to check their LCCC email account on a frequent and consistent basis in order to stay current with their financial aid status.
Please note that students have the responsibility to recognize that financial aid email communications are time sensitive and may require immediate action by the student.
Students who choose to forward their LCCC email account to a private unofficial email address outside of the official college email address do so at their own risk. The college is not responsible for any difficulties that may occur in the proper or timely transmission or access of email forwarded to any unofficial email address. LCCC is not responsible for lost or deleted email due to account closures or storage restrictions.
Upon request, students are entitled to a paper copy by contacting the financial aid office at 610-799-1133 or by sending a written request to Office of Financial Aid, Lehigh Carbon Community College, 4525 Education Park Drive, Schnecksville PA 18078.

Financial Aid Academic Progress Policy

Federal regulations require that students maintain satisfactory academic progress to be eligible for financial aid. Students in associate degree programs will be reviewed at the end of the spring semester. Students in certificate programs will be reviewed at the end of the fall and spring semesters. We begin checking academic progress once the student has attempted 12 credits. The entire official academic transcript, including all transfer credits as well as credits that appear even though the student was granted academic restart, will be reviewed even if the student was not a financial aid recipient. Permission to enroll does not equal financial aid satisfactory academic progress. Any classes taken during any summer session (within the same summer) are viewed as one enrolled term. Only credit courses are considered for satisfactory academic progress evaluation.

Satisfactory academic progress is measured on:

1. The maximum length of time for which a student may receive financial aid.
2. The number of credit hours successfully completed including transfer credits or credits that appear on the official academic transcript even if the student was granted academic restart divided by the number of credit hours attempted.
3. The minimum cumulative GPA a student must maintain based on the credits successfully completed. (The minimum cumulative GPA does not include transfer credits.)

Maximum Length of Time

Federal regulations indicate that a student may receive financial aid for no longer than 150% of the published length of his/her educational program. For example, for programs requiring 60 credits, the maximum time frame is the equivalent of six full-time semesters or 90 attempted credits. A student will not receive financial aid after having attempted 90 credits (including transfer credits or credits appearing on an official academic transcript as a result of academic restart). For programs requiring 30 credits, the maximum time frame is 45 attempted credits. A student will not receive financial aid after having attempted 45 credits (including transfer credits or credits appearing on an official academic transcript as a result of academic restart). **Students who have changed majors and who are seeking additional degrees are limited to additional financial aid up to a total of 90 attempted credits for an associate degree and 45 attempted credits for a certificate program regardless of the number of credits required to complete the additional degree or certificate.**

Percentage of Credit Hours Successfully Completed Divided by the Number of Credit Hours Attempted

Credit hours attempted are the sum of all LCCC credit hours for which tuition was charged, whether or not financial aid was received, plus all transfer hours accepted for credit as well as all credit hours appearing on an official academic transcript for which the student was granted academic restart. If a student changes course of study, the credit hours attempted under all courses of study are included in the calculation of attempted and earned credit hours. A student is required to earn 67% of all credits attempted as described above. This quantitative standard is the percentage calculated as "number of credit hours earned" divided by "number of credit hours attempted." Audited classes (L) are never eligible for financial aid assistance. Most remedial credits are not counted as attempted or earned credits. The following remedial classes are counted in attempted credits with the final grade received counted as an earned grade: ENG 100, RSS 100.

Minimum Cumulative GPA

A student must attain the following cumulative grade point average:

ATTEMPTED CREDIT HOURS	GPA	
1-12 credit hours	1.00	
13-24 credit hours	1.50	
25-36 credit hours	1.75	
37+ credit hours	2.00	

- Some LCCC programs have additional or more stringent satisfactory academic progress policies.
- A student may receive financial aid for a previously passed course only once.
- A student who enrolled in a course and passed it, then enrolled in the class again and failed it, is not eligible again for financial aid for that class.
- A student may not receive financial aid for classes not required by his/her major.
- A student may receive federal financial aid for no more than 30 remedial credits.
- Transfer credits accepted from other schools are counted towards completion of the student's program as both attempted and completed hours.
- ESL courses are counted as developmental credits up to a limit of 30 credits.
- Students may only receive a financial aid academic appeal once during the time they are attending Lehigh Carbon Community College.
- An incomplete grade that becomes a failing grade may result in a student failing to meet financial aid satisfactory academic progress. See below for additional information about failure to maintain satisfactory academic progress.

Right to Appeal

If a student fails to make satisfactory academic progress, they have the opportunity to appeal his/her academic progress to the Office of Financial Aid in writing. Appeal forms are available on the LCCC website. Click on "Financial Aid", "Deadline Codes & Forms" and scroll down to "Financial Aid Appeal." Appeals are considered if the lack of academic progress resulted from death of a relative of the student, an injury or illness of the student, family difficulties, interpersonal problems, difficulty balancing work, family, school, financial, or other special circumstances. Appeals are considered on a case-by-case basis and reviewed by the Office of Financial Aid within 30 days of receipt of the appeal form. The decision or recommendation of the Office of Financial Aid is final. When an appeal is approved, the student's financial aid eligibility will be reinstated with specific conditions for the student to meet to remain eligible for financial aid. If the conditions of the appeal are not met then the appeal becomes void for the next semester and the student is no longer eligible for financial aid. If the initial appeal is denied, the student will remain in an ineligible status and must pay for educational costs.
If the student is denied aid based on his/her academic progress, that denial takes precedence over any previous award notification they may have received. Students may only receive a financial aid academic appeal once during the time they are attending Lehigh Carbon Community College.

Reestablishing Satisfactory Progress

A student may reestablish his/her eligibility to receive financial assistance by enrolling at Lehigh Carbon Community College at his/her own expense and completing a sufficient number of courses at a sufficiently high GPA to meet the standards. If you have any questions, please contact the Office of Financial Aid at 610-799-1133.

Financial Aid Credit

All forms of financial aid except college employment or Federal Work Study appear as a credit on a student's account to be used for the payment of tuition and fees. Students whose financial aid awards exceed the direct costs of tuition, fees, books and supplies may receive the excess funds 14 days after the disbursement date of each semester or approximately four weeks after the first day of classes. The student's excess funds will be released after the college certifies eligibility for the funds such as current enrollment or other factors. Funding must be adjusted during this review if a student's enrollment has changed or the student becomes ineligible for the funds because of nonattendance or other factors. The Business Office issues any excess funds to students through Customer Bank's BankMobile Vibe account Debit Master Card 14 days after disbursement to student accounts.

Withdrawal Policy for Students Receiving Financial Aid

The Office of Financial Aid must be notified in writing or orally (if the student is unable to provide a written withdrawal notice) of the student's intent to withdraw. A withdrawal notice is not official until it is received by the Office of Registration/Student Records.
If a student receives any type of financial aid (grants, scholarships and loans) and officially withdraws completely from classes before the tenth week of class (60% of the semester), the student is required to have his/her financial aid prorated based on the U.S. Dept. of Education's Federal Refund Policy. A student who falls under this criterion will have the appropriate percentage of his financial aid returned to the appropriate fund and is responsible to pay any balance remaining on the account as a result of the

calculation. For example, a student who totally withdraws within any of the following time periods, depending on the actual day of withdrawal, must have his/her financial aid prorated using the actual percentage of the amount of financial aid earned and the amount of time the student attended classes. For example: students withdrawing during the:

1. first week of class must have between 90% and 99% of financial aid returned
2. second week of class must have between 80% and 89% of financial aid returned
3. third week of class must have between 79% and 85% of financial aid returned
4. fourth week of class must have between 75% and 80% of financial aid returned
5. fifth week of class must have between 65% and 75% of financial aid returned
6. sixth week of class must have between 60% and 65% of financial aid returned
7. seventh week of class must have between 55% and 60% of financial aid returned
8. eighth week of class must have between 45% and 50% of financial aid returned
9. ninth week of class must have between 40% and 49% of financial aid returned
10. A student withdrawing during the tenth week depending on the exact day of withdrawal will not be subject to a withdrawal calculation and has earned all of his/her financial aid.

Please note that students who withdraw during the refund period must still have his/her financial aid prorated based on the number of weeks spent in class. The reduction of costs as a result of withdrawing during the refund period (week 1, 2 or 3) does not affect the percentage used to prorate financial aid or eliminate any balance that may be owed by the student as a result of withdrawing.
Funds are returned to the Title IV programs in the following order:

- Federal Direct Unsubsidized Loan
- Federal Direct Subsidized Loan
- Federal PLUS Loan
- Federal Pell Grant
- Federal SEOG.

Lehigh Carbon Community College is required to return the amount of Title IV funds for which it is responsible as soon as possible but not later than 45 days after the date of the institution's determination that a student withdrew.
Students who have withdrawn and have borrowed a student loan, will have the amount of the loan which must be canceled as a result of the withdrawal of the student, returned directly to the lender. This return will reduce the principal amount of the loan that was originally borrowed by the student.

Unofficial Withdrawals

A student who begins attendance who has not officially withdrawn subsequently stops attending all classes will be considered an unofficial withdrawal. The college is required by the U.S. Department of Education to prorate and adjust, to the last date of attendance at an academically related activity as reported by the faculty, the amount of financial aid the student received for the semester. The student is responsible to pay any balance remaining on his/her account as a result of this adjustment.

Employment

College Employment

Students are asked to complete the financial aid application process to be considered for part-time employment; however, financial need is not a requirement for participation in this employment program. College employment funds are paid directly to the student for hours worked. Earnings may not exceed the amount awarded to the student.

Federal Work-Study Program

The Federal Work-Study Program provides students with an opportunity to earn money during the academic year and during the summer. The Office of Financial Aid awards these federal funds based on financial need and on fund availability. Federal work-study funds are paid directly to the student for hours worked. Earnings may not exceed the amount awarded to the student.

Grants and Scholarships (No Repayment Necessary)

Federal Pell Grant

After completing and submitting the FAFSA, students will receive a Student Aid Report (SAR) with an official Expected Family Contribution (EFC) figure. This figure will determine eligibility for a Federal Pell Grant. Federal Pell Grant amounts are prorated based upon enrollment status. Students may receive 12 semesters worth of full- time Pell grant eligibility.

Federal Supplemental Educational Opportunity Grant (FSEOG)

These grants are awarded by Lehigh Carbon Community College from funds allocated by the federal government. Award amounts will vary based on financial need, the enrollment status of the student, the availability of funds, and Pell grant eligibility.

Lehigh Carbon Community College Foundation Scholarships

The LCCC Foundation provides annual scholarships to many students attending Lehigh Carbon Community College. The LCCC Foundation also awards donor- designated scholarships on an annual basis. A completed and processed Free Application for Federal Student Aid must be on file in the Financial Aid Office in order to be considered for an LCCC Foundation Scholarship.

Lehigh Carbon Community College Morgan Foundation Scholarships

In 2002, the John E. Morgan Charitable Trust II announced that it will fund Morgan Success Scholarships for qualified applicants who have graduated from Tamaqua Area High School. Each year the Morgan Foundation sets aside funds that the Foundation anticipates will be sufficient to cover full tuition scholarships for the number of graduating Tamaqua Area High School seniors who attend LCCC, based upon historic and predicted attendance rates. If the number of graduates who actually attend LCCC materially exceeds expectations during any year, it is possible that funding will be insufficient to provide full scholarships. In that event, all scholarships for that year will be reduced on a pro-rata basis, so that each student will receive the largest scholarship possible.

Applicants must meet the following criteria:

- be a current graduate of Tamaqua Area High School.
- have attended Tamaqua Area High School for no fewer than two academic years immediately prior to graduation.
- apply for admission to LCCC no later than April 1.
- complete the FAFSA form no later than April 1 at www.studentaid.gov and designate LCCC 006810 on the form.
- be a degree-seeking candidate.
- be enrolled in at least nine credit hours for fall and spring semesters.
- not be on academic probation.
- not be related to any trustee of the John E. Morgan Charitable Trust II.
- complete a "Morgan Success Scholarship Application" form (available from the LCCC Admission Office) and submit it with the LCCC application for admission by April 1.

Pennsylvania State Grant

The state grant program awards funds to students who demonstrate financial need according to state criteria, are bona fide residents of Pennsylvania, have not received their first baccalaureate degree in any field, and are enrolled in credit classes for at least six credits per term in an approved two-year degree program of at least60 credits. Students who received a state grant for attendance at another institution prior to attending LCCC must also provide an academic transcript from the school previously attended to the Office of Financial Aid.

Academic Progress Policy for Pennsylvania State Grant Recipients Who Remain Enrolled in State Grant-Eligible Programs

Students who have received state grant assistance are required to make satisfactory academic progress for each academic year (fall, spring and/or summer semester) during which state grant aid is received, a student must successfully complete the minimum number of credits appropriate to the student enrollment status during the terms for which state grant aid was received. For example, if a student last received state grant aid during the previous academic year and received two full-time semesters of state grant aid, the student must have successfully completed 24 semester credits during or since those two terms in order to be eligible for the next academic year. Likewise, if the student last received state grant aid during the previous academic year and received two half-time semesters of state grant aid, the student must have successfully completed 12 to 22 semester credits during or since those two terms to be eligible for the next academic year. Progress for state grant purposes is checked at the end of each academic year.

Loans (Must be Repaid with Interest)

William D. Ford Federal Direct Loan Program

Students do not borrow funds from banks. The Federal government raises the loan funds through its regular Treasury bill auctions and the federal government is the recipient of loan repayments. Loan types available through this program are Subsidized Loans, Unsubsidized Loans or Plus Loans. Students apply for these loans online at www.studentaid.gov.

The different types of loans under these programs are:

Direct Subsidized Loans

The Federal Direct Subsidized Loan program assists students with meeting educational costs by providing low-interest, long-term loans. If the student demonstrates financial need for the loan, the interest is subsidized by the government while the student is enrolled at least half time (six credits per semester) and until a six-month grace period has expired.

Eligibility for a loan is based on the EFC (Expected Family Contribution) calculated by the FAFSA. Families must demonstrate financial need for the loan according to criteria established by the U.S. Department of Education. Students must complete the FAFSA form at studentaid.gov to be considered for a Federal Direct Subsidized Loan.

The subsidized loan amount is limited to demonstrated need up to a maximum of $3,500 for a dependent first- year undergraduate student (less than 30 credits earned) and $4,500 for a dependent student who has successfully completed the first year (a minimum of 30 credits) and is in the second year of undergraduate study.

Loan amounts are prorated when a program, or the remaining part of a program, is less than an academic year and when the student's enrollment status is less than full time.

The interest rate varies by year.

Repayment commences six months after the month in which the student either graduates or ceases to be enrolled at least half time.

Federal Direct Unsubsidized Loans

Dependent students who do not qualify for the full interest subsidy under the Federal Direct Subsidized Loan program may receive a Federal Direct Unsubsidized Loan. The Federal Direct Unsubsidized Loan differs from the Federal Direct Subsidized Loan in that all the interest on the loan during in-school, grace and deferment periods must be paid by the student.

First year dependent undergraduate students may borrow a maximum of $5,500 (up to $3,500 subsidized plus $2,000 unsubsidized) and second year (over 30 credits successfully completed) dependent undergraduate students may borrow a maximum of $6,500 (up to $4,500 subsidized plus $2,000 unsubsidized). Therefore students who demonstrate need on paper for only part of the annual Federal Direct Subsidized Loan limit may borrow the remainder through the Federal Direct Unsubsidized Loan program.

First year independent undergraduate students may borrow a maximum of $9,500 (up to $3,500 subsidized plus $6,000 unsubsidized) and second year (over 30 credits successfully completed) independent undergraduate students may borrow a maximum of $10,500 (up to $4,500 subsidized plus $6,000 unsubsidized).

The interest rate on the Federal Direct Unsubsidized Loan is variable by year and may be capitalized. Repayment of principal and all capitalized interest commences six months after the month in which the student either graduates or ceases to be enrolled at least half time.

NOTE: No student may borrow in excess of the cost of attendance as calculated by the Office of Financial Aid. Each loan must be disbursed in two equal payments.

Federal PLUS Loans (Parent Loan for Undergraduate Students)

This loan program is for the parents of undergraduate students to help them meet the cost of education. Parents may borrow up to the cost of education minus estimated financial assistance to the student. The interest rate is variable by year. Repayment of the Federal PLUS loan begins 60 days after the last disbursement. Parents are eligible to borrow a Federal PLUS loan only if they have no adverse credit history. Parents complete a PLUS application and promissory note by logging onto www.studentaid.gov.
NOTE: Each loan must be disbursed in two equal payments. No student may borrow in excess of the cost of attendance as calculated by the Office of Financial Aid.

Special Programs

Tax Benefits for Education

Tax benefits may be available to students and their families if they are saving or paying education costs for themselves or another student who is a member of the immediate family. Information is available at www.irs.gov or from a tax preparer.

Military Veterans Information

G.I. Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at www.benefits.va.gov/gibill.

Lehigh Carbon Community College is proud of the military veterans who have served our country. The Montgomery G.I. Bill®, Post/911 G.I. Bill®, and 100% Tuition Paid (National Guard) are several examples of the programs that the government has created to assist veterans in the pursuit of higher education. Applicants with benefits may apply online through the G.I. Bill® website at www.gibill.va.gov.
Transition from military life to college is different than the traditional college student's transition. To help with this adjustment, an academic advisor is assigned who is an expert in the student's chosen field of study. Student veterans and military-affiliated students are encouraged to meet with their advisor to discuss their options and strategies for success in the college environment.
In compliance with the DoD MOU, Lehigh Carbon Community College bans and prohibits its employees from providing commission, bonus or other incentive payment based directly or indirectly on securing Service member enrollments. Furthermore, its employees will refrain from high-pressure recruitment tactics such as making multiple unsolicited contacts (3 or more), including contacts by phone, email or in-person, and engaging in same-day recruitment and registration for the purpose of securing Service member enrollments.

Procedures:

- Apply for the G.I. Bill® – Contact Veterans Affairs or your command to find out what tuition assistance you qualify for. Veterans are encouraged to apply for benefits as soon as possible as it may take up to 20 weeks for the Department of Veterans Affairs to process.
- Apply for Admissions to the college online.
- Submit your official military/Joint Services electronic transcripts online for the Army, Coast Guard, Marine Corps and Navy. For the Air Force, CCAF submit electronic transcript online.
- Veterans can earn up to 18 credits toward the degree program that they aspire to complete. The college assesses previous military education and experience based upon the recommendation of the American Council on Education.
- Complete the Free Application for Federal Student Aid (FAFSA).
- Submit completed Veterans Office Certification Information form to the School Certifying Official, if you are using VA education benefits, so your registration can be certified with the Department of Veterans Affairs.
- Disability Services – Are you a veteran who may need support at LCCC due to a disability? Please contact Educational Support Services at 610-799-1156.
- Contact the Assistant Director of Returning Adult and Veterans for information and resources on veterans at 610-799-1545.
- The Career Development Center provides a variety of services to current students and will assist you with job search assistance, resume and cover letter development and review.

Students must maintain a minimum cumulative GPA of 2.0 to remain in good academic standing. Veterans/reservists/eligible dependents failing to maintain a 2.0 will be placed on academic alert, probation or suspension based upon their GPA. At the end of two academic semesters if the academic standing is below a 2.0, the college can no longer certify your educational benefits for future semesters.

For veterans benefits, full-time status is defined as 12 or more credits per semester. In terms of shorter duration, "training" time is determined by the number of standard class sessions per week. This definition applies to the veterans programs for the education of spouses, surviving spouses and sons and daughters of veterans. Questions about veterans benefits should be referred to the staff in the Office of Registration/Student Records.

PA ACT 11

As required by PA Act 11 of 2015, Veterans and Military Personnel, their spouses, and/or dependent children, may be eligible for reduced tuition rates as outlined below.

- Veterans, their spouses, and/or dependent children, who reside in the Commonwealth of PA will be granted a tuition rate equivalent to the local sponsorship rate. For purposes of this policy, a veteran student is defined as an individual who: (a) Served in the United States Armed Forces, including a reserve component and National Guard, and was discharged/released from service under conditions other than dishonorable; or one who is an active-duty service member; and (b) Resides in Pennsylvania while enrolled at Lehigh Carbon Community College.
- Active military personnel, their spouses, and/or dependent children, who are enrolled online (distance) and who reside outside of the Commonwealth, will be granted a tuition rate equivalent to the local sponsorship rate.
- Any individual who receives VA education benefits under chapters 1606, 1607, 30, 31, and 33, and who resides outside of the Commonwealth, will be granted a tuition rate equivalent to the local sponsorship rate.
- Civilian personnel who work at a Department of Defense facility in the Commonwealth of PA, their spouses, and/or dependent children, will be granted a tuition rate equivalent to the local sponsorship rate.

As outlined above, those who qualify must provide proof of service, which may include one of the following: DD214, current military ID, and/or VA Certificate of Eligibility. Documentation must be submitted here.

Veteran Preference Course Scheduling Policy

Act 46 of 2014 requires public institutions of higher education in Pennsylvania to establish and provide veteran students with preference in course scheduling. Noncompliance may be reported to the Pennsylvania Department of Education by submitting the Higher Education Student Complaint Form at education.pa.gov. Lehigh Carbon Community College veteran and military-affiliated students are given course scheduling priority privileges. Veteran and military-affiliated students will be notified of their registration date and process through their LCCC email.

Veteran and military-affiliated students are defined as those students in the following categories:

1. Is a veteran.
2. The student has served in the United States Armed Forces including a reserve component or National Guard and was discharged or released from such service under conditions other than dishonorable.
3. The student has been admitted to a public institution of higher education.
4. The student resides in Pennsylvania while enrolled in the public institution of higher education.

A veteran or military-affiliated student will be required to provide proof of their military services by either providing their DD214, discharge papers, military orders, etc.; if utilizing G.I. Bill® benefits many may have submitted supporting documentation.

Veteran and military-affiliated students who are given course scheduling privileges will be able to begin registration one day earlier than our regular students. Refer to our regular scheduling timeline as defined by the Executive Director of Registration/Student Records.

Course Scheduling Preference

The regular registration scheduling timeline is on the college website and is available to all students and is published three weeks prior to the beginning of the registration period. Students will be identified in our student information system Banner, and notified of the registration procedures two weeks prior to registration.
Information concerning this will be available on the college website, college catalog, and LCCC Veterans portal.
All inquiries relating to priority course scheduling should be directed to the Executive Director of Registration/Student Records.

Veterans Benefit Transition Act of 2018

LCCC will not impose any penalty including the assessment of late fees, academic holds, or the requirement to borrow additional funds on any individual who is entitled to educational assistance under Chapter 31 or Chapter 33 due to the delay of disbursement of funds from VA. Additional information can be found here.

ROTC

Students at LCCC are eligible to participate in Army Reserve Officer Training Corps (ROTC) programs. All ROTC courses are held on the Lehigh University campus in Bethlehem. Interested students should contact the Department of Military Science (Army) at Lehigh University. For more information, email armyrotc@lehigh.edu.

Academic Calendar

ACADEMIC CALENDAR YEAR 2024-2025

FALL 2024		
August 17	Saturday	*Administrative Offices Open on a Limited Basis 9:00 AM - 3:00 PM (Subject to Change)
August 20	Tuesday	Fall Convocation
August 21	Wednesday	Adjunct/Part-Time Faculty Fall Convocation
August 24	Saturday	*Administrative Offices Open on a Limited Basis 9:00 AM - 3:00 PM (Subject to Change)
August 26	Monday	**Classes Begin: Full Term**
September 1-2	Sunday-Monday	College Closed
September 3	Tuesday	Last Day for Drop/Add or Late Registration: Full Term
September 20	Friday	Attendance Reporting Due: Full Term
October 1	Tuesday	Last Day to File an Application for December Graduation
October 15	Tuesday	College-wide Development Day - No Daytime or Evening Classes Administrative Offices will remain open
October 25	Friday	Midterm Grades Due: Full Term
October 29	Tuesday	Last Day to Make Up "I" Grade from Spring & Summer 2024 Semesters
November 5	Tuesday	Last Day to Withdraw with an Automatic "W": Full Term
November 27	Wednesday	No Daytime or Evening Classes Administrative Offices will remain open
November 28-December 1	Thursday-Sunday	College Closed
December 7	Saturday	Classes End: Full Term
December 9-14	Monday-Saturday	Final Examinations: Full Term
December 16	Monday	Final Grades Due: Full Term
December 18	Wednesday	Fall Graduate Degrees Awarded (No Ceremony)
December 24-January 1	Tuesday-Wednesday	College Closed
December 27	Friday	*Administrative Offices Open on a Limited Basis 9:00 AM - 3:00 PM (Subject to Change)
January 2	Thursday	Administrative Offices Reopen

WINTER 2024-2025		
December 16	Monday	**Classes Begin - Winter Session Online**
December 23	Monday	Attendance Reporting Due
January 6	Monday	Midterm Grades Due
January 7	Tuesday	Last Day to Withdraw with an Automatic "W"
January 17	Friday	Classes End - Winter Session Online

SPRING 2025		
December 24-January 1	Tuesday-Wednesday	College Closed
December 27	Friday	*Administrative Offices Open on a Limited Basis 9:00 AM - 3:00 PM (Subject to Change)
January 2	Thursday	Administrative Offices Reopen
January 18	Saturday	*Administrative Offices Open on a Limited Basis 9:00 AM - 3:00 PM (Subject to Change)
January 21	Tuesday	Spring Convocation
January 22	Wednesday	Adjunct/Part-Time Faculty Spring Convocation
January 24	Friday	**Classes Begin: Full Term**
January 25	Saturday	*Administrative Offices Open on a Limited Basis 9:00 AM - 3:00 PM (Subject to Change)
January 30	Thursday	Last Day for Drop/Add or Late Registration: Full Term
February 1	Saturday	Last Day to File an Application for May Graduation
February 16	Sunday	Attendance Reporting Due: Full Term
March 17-22	Monday-Saturday	Spring Break - No Daytime, Evening or Saturday Classes
March 29	Saturday	Midterm Grades Due: Full Term
April 2	Wednesday	Last Day to Make Up "I" Grade from Fall & Winter 2024 Semesters
April 9	Wednesday	Last Day to Withdraw with an Automatic "W": Full Term
April 18-19	Friday-Saturday	No Daytime or Evening Classes - College Closed
May 9	Friday	Classes End: Full Term
May 12-17	Monday-Saturday	Final Examinations: Full Term
May 19	Monday	Final Grades Due: Full Term
May 21	Wednesday	Spring Graduate Degrees Awarded Commencement Ceremony (This Date is Tentative)

SUMMER 2025: FIRST 5 WEEK OPTION		
May 19	Monday	**Classes Begin**
May 20	Tuesday	Last Day for Add/Drop or Late Registration
May 26	Monday	College Closed
May 28	Wednesday	Attendance Reporting Due
June 1	Sunday	Last Day to file an Application for August Graduation
June 10	Tuesday	Midterm Grades Due
June 11	Wednesday	Last Day to Withdraw with an Automatic "W"
June 19	Thursday	Classes end for TR classes
June 23	Monday	Classes end for MW and MTWR classes
June 24	Tuesday	Final Examinations for TR classes
June 25	Wednesday	Final Examinations for MW and MTWR classes
June 27	Friday	Final Grades Due

SUMMER 2025: 10 WEEK OPTION		
May 19	Monday	**Classes Begin**
May 23	Friday	Last Day for Add/Drop or Late Registration
May 26	Monday	College Closed
June 1	Sunday	Last Day to file an Application for August Graduation
June 5	Thursday	Attendance Reporting Due
June 28	Saturday	Midterm Grades Due
June 30-July 4	Monday-Friday	Non Daytime or Evening Classes Administrative Offices remain open, except July 4
July 11	Friday	Last Day to Withdraw with an Automatic "W"
July 31	Thursday	Classes end for TR classes
August 4	Monday	Classes end for MW and MTWR classes
August 5	Tuesday	Final Examinations for TR classes
August 6	Wednesday	Final Examinations for MW and MTWR classes
August 8	Friday	Final Grades Due
August 19	Tuesday	Summer Graduate Degrees Awarded (No Ceremony)

SUMMER 2025: SECOND 5 WEEK OPTION		
July 7	Monday	**Classes Begin**
July 8	Tuesday	Last Day for Add/Drop or Late Registration
July 16	Wednesday	Attendance Reporting Due
July 28	Monday	Midterm Grades Due
July 29	Tuesday	Last Day to Withdraw with an Automatic "W"
August 6	Wednesday	Classes end for MW classes
August 7	Thursday	Classes end for TR and MTWR classes
August 11	Monday	Final Examinations for MW and MTWR classes
August 12	Tuesday	Final Examinations for TR classes
August 14	Thursday	Final Grades Due

Accreditations

Accreditations Lehigh Carbon Community College is approved as an institution of higher education by the Department of Education of the Commonwealth of Pennsylvania. The college is authorized to award the Associate in Arts, the Associate in Science, and the Associate in Applied Science degrees, as well as certificates and diplomas in specialized career areas.

Lehigh Carbon Community College is accredited by the Middle States Commission on Higher Education, 1007 North Orange Street, 4th Floor, MB #166, Wilmington, DE 19801. (267-5011) www.msche.org. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The following programs have received additional accreditation, certification or endorsement:

Associate Degree Nursing A.A.S.

Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326

Aviation Science A.A.S.

Federal Aviation Administration (FAA)

800 Independence Ave.

Washington, DC 20591

Business Associate Degree Programs

(Accounting A.A.S., Business Administration A.A., Business Management A.A.S. and Human Resource Management A.A.S.) Accreditation Council for Business Schools and Programs (ACBSP)

11520 W. 119th St.

Overland Park, KS 66211

Early Childhood Education A.A.S.

National Association for the Education of Young Children

(NAEYC) 1313 L St. NW, Suite 500

Washington, DC 20005-4101

Health Information Technology A.A.S.

Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

233 N. Michigan Ave., Suite 2150

Chicago, IL 60601

Kitchen and Bath Design

National Kitchen and Bath Association

687 Willow Grove St.

Hackettstown, NJ 07840

Paralegal Studies A.A.S.

American Bar Association (ABA)

Standing Committee on Paralegals

541 N. Fairbanks Court
Chicago, IL 60611

Practical Nursing Certificate
Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326

Tutoring Program - Level I Certification
International College Reading & Learning Association (CRLA)
7044 S. 13th St.
Oak Creek, WI 53154

Veterinary Technician A.A.S.
American Veterinary Medical Association (AVMA)
1931 N. Meacham Road, Suite 100
Schaumberg, IL 60173

All Programs

--- - Dental Hygiene A.A.S. (in cooperation with Montgomery County Community College)

Overview

Program Full Description
The Dental Hygiene Associate Degree program, through an agreement with Montgomery County Community College, is accredited by the Commission on Dental Accreditation. In cooperation with Montgomery County Community College, the Dental Hygiene associate degree program prepares you to work as a dental hygienist in a variety of settings and to provide preventative and therapeutic oral care to the public. You'll receive extensive, hands-on training at Central Campus's new, state-of-the-art Health Sciences Center in its dental hygiene clinic. You'll also gain clinical experience at community-based sites.

Advisor Notes
Upon successful completion of the Dental Hygiene program, you'll receive an Associate of Applied Science degree. If you decide to continue your education, you can transfer your credits to a four-year institution. To make your transfer as smooth as possible, we have established transfer partnerships with several Pennsylvania colleges and universities. We also possess accreditation from The Commission on Dental Accreditation.

Course Sequence

Course Sequence

Lehigh Carbon Community College Coursework

COURSE CODE	COURSE TITLE	CREDITS
ENG 105	Research and Composition	3
ENG 111	Speech	3
ENG 201 or higher	World Literature I or other 200 level ENG	3
SOC 150	Introduction to Sociology	3
PSY 140	Introduction to Psychology	3
BIO 163	Anatomy and Physiology I	4
BIO 124	Nutrition	3
BIO 164	Anatomy and Physiology II	4
BIO 220	Introduction to Microbiology	4
	Total Credits	**30.00**

Montgomery County Community College Coursework

COURSE CODE	COURSE TITLE	CREDITS
DHG 100	Theory and Practice of Dental Hygiene I	4
DHG 111	Dental Anatomy	2
DHG 155	Dental Radiology	2
DHG 158	Theory and Practice of Dental Hygiene II	5
DHG 159	Histology and Pathology of Oral Tissues	3
DHG 161	Periodontics I	2
DHG 220	Theory and Practice of Dental Hygiene III	6
DHG 224	Materials in Dentistry	2
DHG 225	Oral Pharmacology	2
DHG 226	Dental Pain Control	2
DHG 253	Community Dentistry	2
DHG 258	Theory and Practice of Dental Hygiene IV	6
DHG 261	Periodontics II	2
	Total Credits	**40**
	PROGRAM CREDIT TOTAL	**70**

--- - Medical Laboratory Technician A.A.S. (in cooperation with Montgomery County Community College)

Overview

Program Full Description

The Medical Laboratory Technician Program at Montgomery County Community College is accredited by NAACLS, The National Accrediting Agency for Clinical Laboratory Sciences. The Program was most recently awarded continuing accreditation for ten years on October 31, 2020.

5600 N. River Rd.
Suite 720
Rosemont, IL 60018
phone: 733-714-8880
website: www.naacls.org

Get ready for a meaningful medical career with Montco's Medical Laboratory Technician Associate in Applied Science degree program. After successfully completing our program at Blue Bell Campus's state-of-the-art Health Sciences Center, you will be able to perform diagnostic tests on blood and other body fluids. You'll also deliver valuable information to physicians.

Along with clinical courses, your classes include the humanities and sciences. You'll practice what you've learned at campus facilities and area hospital and commercial laboratories. You'll also develop interpersonal skills, study diseases and relate lab work to other aspects of health care.

After completing our nationally accredited program, you will be eligible to take national certification examinations and and be prepared to work in hospitals, commercial and physician labs, pharmaceutical companies and a variety of other laboratories.

Course Sequence

Course Sequence

Lehigh Carbon Community College Courses

COURSE CODE	COURSE TITLE	CREDITS
ENG 105	Research and Composition	3
ENG 111	Speech	3
ART 299	Studio Elective	3
SOC 150	Intro to Sociology	3
PHI 201	Intro to Philosophy	3
OR PHI 205	Intro to Ethics	

Montgomery County Community College Courses

COURSE CODE	COURSE TITLE	CREDITS
BIO 130	Intro to Anatomy and Physiology	4
MLT 110	Intro for the MLT	4
CHE 131	Chemistry for the Technologies I	4
MLT 123	Immunohematology Lecture	2
MLT 124	Immunohematology Lab	1
MLT 125	Hematology Lecture	2
MLT 126	Hematology Lab	1
CHE 132	Chemistry for the Technologies II	4
BIO 141	Clinical Microbiology I	4
MLT 233	Clinical Chemistry Lecture	3
MLT 234	Clinical Chemistry Lab	2
MLT 235	Clinical Practicum in MLT I	3
BIO 241	Clinical Microbiology II	4
BIT 124	Molecular Techniques	2
MLT 244	Professional Issues in MLT	2
MLT 246	MLT Seminar	1
	MCCC Credits	**49**
	TOTAL CREDITS	64

--- - Medical Laboratory Technician A.A.S. (in cooperation with Reading Area Community College)

Overview

Program Full Description

Medical Laboratory Technician program graduates perform tests on blood and body fluids providing critical information to assist physicians in patient diagnosis and treatment, as well as disease monitoring or prevention. Graduates may seek employment with hospitals, independent laboratories, physicians, clinics, public health agencies, pharmaceutical firms and research institutions. Students who successfully complete all program requirements are eligible to sit for a nationally-recognized certification examination. Medical Laboratory Technicians enjoy a career that is ever-changing and challenging with many opportunities for professional and personal growth.

Course Sequence

Course Sequence

Lehigh Carbon Community College Credits

COURSE CODE	COURSE TITLE	CREDITS
ENG 105	Research and Compositions	3
ENG 106	Intro to Literature	3
MAT 105	Intermediate Algebra	3
SOC 150	Intro to Sociology	3
OR PSY 140	Intro to Psychology	3
Elective	Humanities Elective	3
CHE 111	General Chemistry I	3
BIO 163	Anatomy and Physiology I	4
BIO 164	Anatomy and Physiology II	4
BIO 220	Intro to Microbiology	4
	LCCC Credits	**31**

Reading Area Community College Credits

Course Code	Course TITLE	Credits
	SPRING TERM	
CHE 220	Intro to Organic Chemistry	5
	FALL TERM	
CHE 110	Intro to Laboratory	1
CHE 275	Instrument Analysis	4
MLT 210	Clinical Laboratory Techniques	3
HEA 220	Clinical Implications of Laboratory Tests	1
	WINTER TERM	
MLT 120	Basic Immunology	2
MLT 220	Clinical Hematology	4
MLT 221	Clinical Chemistry	4
MLT 222	Clinical Urinalysis	1
	SPRING TERM	
MLT 230	Clinical Blood Banking and Immunology	4
MLT 231	Clinical Microbiology	4
MLT 232	Clinical Coagulation	1
MLT 233	Clinical Serology	1
	RACC Credits	**35**
	TOTAL CREDITS	**66**

--- - Respiratory Care A.A.S. (in cooperation with Reading Area Community College)

Overview

Program Full Description

The Respiratory Care Associate Degree program, through an agreement with Reading Area Community College, is accredited by the Committee on Accreditation for Respiratory Care (COARC).

The Associate Degree program in Respiratory Care prepares the student to assume responsible positions as part of the Health Care team. The graduate will be eligible to sit for the National Registry Examination, administered by the National Board for Respiratory Care (N.B.R.C.). Respiratory Care students participate in various classroom, laboratory and clinical experiences. The laboratory provides students the opportunity for hands-on experience in preparation for clinical practicum. The classroom courses give the student the foundational knowledge in Respiratory Care. The Respiratory Care program is accredited by the Committee on the Accreditation for Respiratory Care (COARC), 1248 Harwood Road, Bedford, TX 76021, 817-283-2835, https://www.coarc.com) - Associate in Applied Science Degree in Respiratory Care. College credit may be granted through Tech Prep articulation agreements between RACC and approved secondary schools.

Advisor Notes

The student from Lehigh Carbon Community College who has successfully completed specific general education requirements at LCCC and specific program requirements at RACC may be granted admission to the Respiratory Care Program per stated selective admission requirements at Reading Area Community College. The student must see advisor or transfer counselor. Reading Area Community College (RACC) will accept and grant credit for Lehigh Carbon Community College's courses that are listed as equivalent if the student has completed the course with a grade of "C" or higher.

ADDITIONAL RESPIRATORY CARE PROGRAM POLICIES:

1. All required pre-requisites and general education courses must have a grade of "C" or better. Respiratory Care Program GPA - (All required general education courses) must be at least a 2.5 and include transfer courses as well as original courses grades if repeated. No developmental courses are counted as part of the Respiratory Care Program GPA.
2. All required general education courses in the Respiratory Care Program Curriculum cannot be repeated more than once for any reason ("W" as well as any grade less than a "C" grade). This includes courses completed at RACC as well as transfer from another institution of higher learning. Course repeats or withdrawals that are greater than ten years may be excluded from consideration in the admissions process at the discretion of the program director.
3. All Respiratory Care Program courses must be completed with a "C" or better for progression within the program.
4. Only one readmission is permitted to the Respiratory Care Program and must occur within one year of program withdrawal.

The Respiratory Care Program at RACC is accredited by the Committee for Accreditation of Respiratory Care (CoARC) for a maximum of 24 students in each of the 'RES' or clinical courses. A cohort of 24 students (maximum) is selected in the Spring semester prior to the first RES course (respiratory Care I or RES 150), which begins each Fall semester.

In the even that more than 26 students submit Letters of Application, a selection process will be used to rank the students. The top 24 ranked students will be accepted into the cohort. The remaining students will be placed on a waiting list for the upcoming Fall semester, based on ranking in the selection process. On the first day of the Fall semester, the wait list will be cleared and the remaining students must reapply for the next academic year.

Completion Requirements

Simple Requisites

Requirements

Respiratory Care Requirements
Type
Completion Requirement

Lehigh Carbon Community College Coursework Requirements

Complete ALL of the following Courses:

- BIO163 - Anatomy & Physiology I
- BIO164 - Anatomy & Physiology II
- BIO220 - Introduction to Microbiology
- ENG105 - Research and Composition
- ENG111 - Speech
  OR ENG107 - Writing in the Workplace
- MAT121 - Mathematics for Allied Health
- PHI205 - Introduction to Ethics
- PSY140 - Introduction to Psychology
- PSY145 - Human Growth & Development
- SDS105 - Health Science Careers

Reading Area Community College Coursework Requirements

RES 150, 200, 212, 227, 232, 237, 255, 265

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Lehigh Carbon Community College Coursework

Course Code	Course Title	Credits
	LCCC COURSEWORK	
SDS 105	Exploration of Health Science Careers	1
ENG 105	Research and Composition	3
ENG 111	Speech	3
or ENG 107	Writing in the Workplace	
MAT 121	Mathematics for Allied Health	3
PSY 140	Introduction to Psychology	3
PHI 205	Introduction to Ethics	3
BIO 163	Anatomy and Physiology I	4
BIO 164	Anatomy and Physiology II	4
BIO 220	Introduction to Microbiology	4
PSY 145	Human Growth and Development – The Life Span	3
	Total Credits	**31**

Reading Area Community College Coursework

Course Code	Course Title	Credits
	FIRST SEMESTER	
RES 150	Reparatory Care 1	5
RES 212	Pharmacology	2
	SEMESTER TOTAL	**7**
	SECOND SEMESTER	
RES 200	Cardiopulmonary Physiologic Processes	2
RES 227	Respiratory Care II	7
	SEMESTER TOTAL	**9**
	SUMMER SESSION	
RES 232	Neonatal and Pediatric Respiratory Care	2
RES 237	Respiratory Care III	3
	SEMESTER TOTAL	**5**
	THIRD SEMESTER	
RES 255	Respiratory Care IV	9
	SEMESTER TOTAL	**9**
	FOURTH SEMESTER	
RES 265	Respiratory Care V	9
	SEMESTER TOTAL	**9**
	Total Credits	**39**

ACC - Accounting A.A.S.

Overview

Program Full Description

This career program is designed to provide students with the necessary skills for entry level accounting positions in such areas as accounts receivable, accounts payable, payroll and purchasing. Or, use this program as a starting point to pursue a Bachelor's Degree and look forward to career opportunities in corporate accounting, public accounting and auditing, nonprofit and government accounting, tax and consulting services.

Advisor Notes

Students should take BUS 109 in the first semester Recommended elective for first semester is MAT 118.Recommended electives for second semester are MAT 155 and 160.Recommended Social Science electives are ECO 201 and 202. AOT 112 is recommended but not required. Students planning to transfer to a senior college or university to major in accounting should enroll in the Business Administration A.A. transfer program, take ACC 160 and 161, and meet with an advisor before taking advanced-level accounting courses.

Completion Requirements

Simple Requisites

Requirements

Accounting A.A.S. requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ACC160 - Principles of Accounting I
- ACC161 - Principles of Accounting II
- ACC201 - Intermediate Accounting I
- ACC202 - Intermediate Accounting II
- ACC203 - Cost/Managerial Accounting
- ACC205 - Income Tax Accounting
- ACC262 - Accounting Information Systems
- BUS109 - Business as a Major
- BUS120 - Intro to Business Organization
- BUS211 - Principles of Management
- BUS209 - Business Communications
- BUS221 - Principles of Marketing
- BUS241 - Business Law I
- BUS284 - Business Internship
  OR BUS285 - Global Business Practice Firm

General Education Requirements

Complete ALL of the following Courses:

- CIS105 - Introduction to Computers and Applications
- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
  OR ENG107 - Writing in the Workplace
  OR ENG108 - Creative Nonfiction
- PSY140 - Introduction to Psychology
  OR SOC150 - Introduction to Sociology

Electives

Complete ALL of the following Course Sets:

- Mathematics Elective
- Mathematics Elective
  OR Science Electives
- Social Science Electives
  OR Humanities Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ACC 160	Principles of Accounting I	3
BUS 109	Business as a Major	1
BUS 120	Introduction to Business Organization	3
CIS 105	Introduction to Computers and Applications	3
ENG 105	Research and Composition	3
Elective	Mathematics	3-4
	SEMESTER TOTAL	**16-17**
	SECOND SEMESTER	
ACC 161	Principles of Accounting II	3
ACC 205	Income Tax Accounting	3
BUS 211	Principles of Management	3
ENG 106	Introduction of Literature	3
Or ENG 107	Writing in the Workplace	
Or ENG 108	Creative Nonfiction	
Elective	Mathematics/Science	3-4
	SEMESTER TOTAL	**15-16**
	THIRD SEMESTER	
ACC 201	Intermediate Accounting I	3
ACC 203	Cost/Managerial Accounting	3
BUS 209	Business Communications	3
BUS 221	Principles of Marketing	3
PSY 140	Introduction to Psychology	
Or SOC 150	Introduction to Sociology	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
ACC 202	Intermediate Accounting II	3
ACC 262	Accounting Information Systems	3
BUS 241	Business Law I	3
BUS 285	Global Business Practice Firm	4-6
Or BUS 284	Business Internship (Accounting Option)	
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**16-18**
	PROGRAM TOTAL	**62**

ACCC - Accounting Certificate

Overview

Program Full Description

This program will provide students with accounting skills necessary to obtain entry-level positions in business as an accounts payable clerk, accounts receivable clerk, billing and posting clerk, purchasing clerk or as a bookkeeper. Credits may be applied toward the A.A.S. degree in Accounting.

Completion Requirements

Simple Requisites

Requirements

Accounting Certificate requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ACC160 - Principles of Accounting I
- ACC161 - Principles of Accounting II
- ACC201 - Intermediate Accounting I
- ACC202 - Intermediate Accounting II
- ACC203 - Cost/Managerial Accounting
- ACC205 - Income Tax Accounting
- ACC262 - Accounting Information Systems
- BUS120 - Intro to Business Organization
- BUS209 - Business Communications
- BUS241 - Business Law I
- CIS105 - Introduction to Computers and Applications

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ACC 160	Principles of Accounting I	3
BUS 120	Introduction to Business Organization	3
CIS 105	Introduction to Computers and Applications	3
	SEMESTER TOTAL	**9**
	SECOND SEMESTER	
ACC 161	Principles of Accounting II	3
ACC 205	Income Tax Accounting	3
	SEMESTER TOTAL	**6**
	THIRD SEMESTER	
ACC 201	Intermediate Accounting I	3
ACC 203	Cost/Managerial Accounting	3
BUS 209	Business Communications	3
	SEMESTER TOTAL	**9**
	FOURTH SEMESTER	
ACC 202	Intermediate Accounting II	3
ACC 262	Accounting Information Systems	3
BUS 241	Business Law I	3
	SEMESTER TOTAL	**9**
	PROGRAM TOTAL	**33**

ADMC - Administrative Assistant Certificate

Overview

Program Full Description

The program is designed to prepare the student for entry-level employment in todays business office. It provides students with the secretarial knowledge and skills for employment in a variety of industries. Jobs for which graduates are expected to be qualified include secretary, administrative assistant, and office assistant.

Advisor Notes

Placement testing is available for AOT 112, 113, 114, 117, and 118 (Keyboarding sequence). Some courses may be used to build toward an A.A.S. degree in Business Management.

Completion Requirements

Simple Requisites

Requirements

ADMC - Program Requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- AOT112 - Keyboarding I
- AOT113 - Keyboarding II
- AOT114 - Keyboarding III
- AOT206 - Office Procedures
- ACC160 - Principles of Accounting I
- BUS120 - Intro to Business Organization
- BUS209 - Business Communications
- CIS105 - Introduction to Computers and Applications
- CIS110 - Business Information Systems
- IDS105 - Think, Prob Solv, Team Buildin

Electives

Complete ALL of the following Course Sets:

- Business Electives
- Business Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

SUMMER		CREDITS
AOT 112*	Keyboarding I	1
AOT 113*	Keyboarding II	1
AOT 114*	Keyboarding III	1
or AOT 115*	Typing I	
CIS 105	Introduction to Computer Science & Applications	3.5
	Semester Total	6.5
FIRST SEMESTER		
AOT 117*	Keyboarding IV	1.5
AOT 118*	Keyboarding V	1.5
or AOT 116*	Typing II	
AOT 206	Office Procedures	3
BUS 120	Introduction to Business	3
BUS 209	Business Communications	3
	Semester Total	12
SECOND SEMESTER		
IDS 105	Thinking, Problem Solving & Team Building	3
ACC 160	Principles of Accounting I	3
Elective**	ACC, AOT, BUS, CIS PLG, or RES	6-7
Elective	Free Elective	3
	Semester Total	15-16
	Credit Total	33.5-34.5

ADN - Nursing A.A.S.

Overview

Program Full Description

The Associate Degree nursing program at Lehigh Carbon Community College at the Main Campus located in Schnecksville, Pennsylvania; at the Donley Center Site located in Allentown, PA; and the Morgan Center Site located in Tamaqua, Pennsylvania is accredited by the: Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000 www.acenursing.org.The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate Degree nursing program is Continuing Accreditation. The Nursing Associate Degree program maintains full approval status with the Pennsylvania State Board of Nursing. The associate degree nursing program prepares graduates to deliver quality care to promote and/or maintain and restore health and well-being. Emphasis of this program will be educating persons to perform holistic nursing care in a variety of healthcare settings. In addition to classroom instruction, students will receive clinical instruction. Students who earn an Associate in Applied Science degree in Nursing must successfully complete the Virtual ATI NCLEX-RN review course to be eligible to sit for the National Council Licensing Examination (NCLEX-RN). Success on this examination qualifies a nurse to practice as a registered/licensed nurse.

Advisor Notes

Nursing is a restricted program. Students are accepted on a competitive basis based on available seats and meeting requirements for program entrance. Students interested in applying for Nursing should enter the Health Science A.S. program and complete the prerequisites listed in the Nursing Program Sequence. See the Admission Requirements for details on admission to the program. To continue in the program, students must maintain a minimum GPA of 2.20 and earn a C+ or better in all nursing courses. Students must earn a grade of “C” or better in required general education requirements to graduate. Students who have earned a “D” or “F” or have withdrawn are

readmitted on a space-available basis only. A student may repeat only one nursing course (prefix ADN) in which a “D” or “F” grade has been earned. Requirements of the program will be the requirements at the time of readmission. Special program costs include health examinations, supplies, uniforms, standardized examinations, vaccinations, insurance, and SNAP membership.

Course Sequence

Course Sequence

Pre-Nursing Prerequisites – Completed in Health Science A.S. program

Course Code	Course Title	Credits	Prereqs
	PREREQUISITE COURSES		
BIO 163	Anatomy and Physiology I	4	
BIO 164	Anatomy and Physiology II	4	BIO 163
ENG 105	Research and Composition	3	
MAT 121	Mathematics for Allied Health	3	
PSY 140	Introduction to Psychology	3	
	Prerequisite TOTAL	**17**	
	PRE-ADN SEMESTER		
SDS 110	Introduction to Associates Degree Nursing	1	BIO 163,164,220; ENG 105; MAT 121, PSY 140
or SDS 111	Introduction to LPN to Associate Degree Nursing		
BIO 220	Introduction to Microbiology	4	BIO 163
ENG 106	Introduction to Literature	3	ENG 105
PSY 145	Human Growth and Development	3	PSY 140
SOC 151	Modern Social Problems	3	
or SOC 150	Introduction to Sociology		
	SEMESTER TOTAL	**14**	

Nursing A.A.S. - Program Sequence

	FIRST SEMESTER		
ADN 150	Fundamentals of Nursing	8	SDS 110 or SDS 111
	SEMESTER TOTAL	**8**	
	SECOND SEMESTER		
ADN 160	Medical Surgical Nursing I	7	ADN 150
	SEMESTER TOTAL	**7**	
	THIRD or FOURTH SEMESTER		
ADN 205	Maternal Newborn Nursing	4	ADN 160 or 173
ADN 215	Pediatric Nursing	4	ADN 160 or 173
	SEMESTER TOTAL	**8**	
	THIRD OR FOURTH SEMESTER		
ADN 225	Mental Health Nursing	4	ADN 160 or 173
ADN 235	Medical Surgical Nursing II	4	ADN 160 or 173
ADN 245	Nursing Leadership	2	ADN 160 or 173
	SEMESTER TOTAL	**10**	
	FOURTH SEMESTER		
ADN 255	NCLEX Prep	2	
	SEMESTER TOTAL	**2**	

	TOTAL CREDITS	**66**	

ARTA - Fine Arts / Studio Arts A.A

Overview

Program Full Description

Students in this program will combine classroom study with studio experiences. While some students may pursue the program of study for personal enrichment rather than transfer, the degree is designed for students preparing to enter a program leading to a baccalaureate degree at a four-year college or university. Because the requirements of four-year colleges or universities vary widely, students should choose an intended transfer college as soon as possible and work with their advisor to follow the program described in that colleges catalog. All students will be expected to prepare a portfolio for transfer or employment applications.

Advisor Notes

Students interested in a Fashion Design focus should choose ART 112, 150 and 153 for Studio Arts Electives. For transfer information regarding this major. Students should consult the catalog of the four-year college or university to which they plan to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer and University Center. For more information, contact an academic advisor or counselor.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ART 101	Introduction to Art	3
ART 108	Two-Dimensional Design	3
ART 110	Drawing I	3
ENG 105	Research and Composition	3
Elective	Mathematics	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
ART 111	Color Theory	3
ART 115	Painting I	3
ART 135	Three Dimensional Design	3
ENG 106	Introduction to Literature	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
ART 210	Drawing II	
or ART 215	Painting II	3
Elective	Studio Art	3
Elective	Laboratory Science	4
Elective	Social Science/Humanities	3
Elective	Free Elective	3
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
ART 265	Professional Practices Capstone in Fine Arts	3
Elective	Studio Art	6
Elective	Social Science/Humanities	3
Elective	Free Elective	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**61**

ATS - Applied Technical Studies A.A.S.

Overview

Program Full Description

Designed for students who have successfully passed or whose goal is to pass the national Skill Standards or credentialing exam(s) in a designated technical field. This degree is intended for those students whose educational and occupational goals are not met by the college's other occupational and transfer majors. It allows students to build a sequence of courses to satisfy specific skills for employment and upon successful completion, results in the award of the Associate of Applied Science degree.

Advisor Notes
The major may be of particular interest to potential and current Career and Technical Education (CTE) high school students and graduates. Students are admitted to this major only after indicating occupational objective they expect to achieve through completion of the program. Interested students should contact the Director of High School Connections.

To receive this degree, the student must:

1. Pass the national Skill Standards or credentialing exam(s).

2. Document that appropriate exam(s) have been passed within the last five year~.

3. Meet all degree requirements as descripted under Degree as stated in this catalog.

4. Complete the general education requirements as listed.

Completion Requirements

Simple Requisites

Requirements

Applied Technical Studies A.A.S.
Type
Completion Requirement

Technical Education Requirements

30 credits will be provided by technical education partners, which are appropriate accredited, licensed, certified, or otherwise approved technical education organizations. Student may need to take additional developmental courses based upon assessment scores. Credits will be awarded upon the successful completion of National Skills Standards and/or credentialing exams(s) and after students have met LCCC residency requirements.

Program Requirements

Complete ALL of the following Courses:

- BUS120 - Intro to Business Organization
- CIS105 - Introduction to Computers and Applications
- CMN112 - Oral Communica & Presentation
- ENG105 - Research and Composition
- ENG107 - Writing in the Workplace
- IDS105 - Think, Prob Solv, Team Buildin
- MAT130 - Industrial Mathematics
- PHY110 - Elements of Physics

Electives

Complete ALL of the following Course Sets:

- Social Science Electives
  OR Humanities Electives
- Social Science Electives
  OR Humanities Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence
30 credits will be provided by technical education partners, which are appropriate accredited, licensed, certified, or otherwise approved technical education organizations. Student may need to take additional developmental courses based upon assessment scores. Credits will be awarded upon the successful completion of National Skills Standards and/or credentialing exams(s) and after students have met LCCC residency requirements.

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
CIS 105	Intro to Computers and Applications	3
Elective	Social Science/Humanities	3
	Semester Total	**9**
	SECOND SEMESTER	
ENG 107	Writing in the Workplace	3
IDS 105	Thinking, Problem Solving, and Team Building	3
CMN 112	Oral Communication and Presentation	3
	Semester Totals	**9**
	THIRD SEMESTER	
MAT 130	Industrial Mathematics	3
Elective	Social Science/Humanities	3
	Semester Totals	**6**
	FOURTH SEMESTER	
BUS 120	Intro to Business Organization	3
PHY 110	Elements of Physics	4
	Semester Totals	**7**
	CREDITS TOTAL	**31**

AVP - Professional Pilot A.A.S.

Overview

Program Full Description

The ground and flight training courses required for the issuance of an airmen certificate within the Aviation Science Associate Degree program are licensed by the Federal Aviation Administration (FAA). This program prepares students to obtain entry-level employment in the aviation industry. It provides both the flight and ground-school training required to successfully earn Federal Aviation Administration (FAA) pilot certification. Students obtain flight training from the FAA approved Part 141 LCCC flight school. Graduates from LCCC flight school may teach at the LCCC flight school and continue their aviation flying careers as pilots in the fields of charter, corporate, and regional airline employment. They are also prepared to transfer to colleges or universities that offer the bachelors degree in an aviation related field. The granting of this degree is based upon the students successful completion of required coursework, and successfully passing the flight checks for the FAA Private, Commercial, and Flight Instructor certificates and the Instrument Airplane rating. An FAA medical certificate is required for enrollment as well as U.S. citizenship or approval from the Transportation Security Administration to initiate flight training. Additional fees will incur for flight training.

Advisor Notes

Students must meet with aviation program director or Chief Flight Instructor for acceptance into this restricted program prior to course enrollment and a minimum of two weeks prior to the start of the semester.

Student Pilot certificate, Second Class FAA medical (First Class highly recommended), U.S. citizen or TSA approval to initiate flight training. An applicant for a student pilot certificate must meet the requirements of Federal Aviation Administration regulation 61.83.

Two failures of the same flight theory or flight practical course will result in the student being removed from further advancement within the degree program.

*MAT 165 requires a prerequisite of MAT 160 College Algebra or LCCC Algebra Placement Testing score of 109 and equivalent college Algebra background.

**MAT 130 or 165 must be completed prior to PHY 110 or 201. Students interested in transfer to a bachelor's program are recommended to take MAT 165 and PHY 201.

Students have the option of choosing between earning the Certified Flight Instructor Certification (ASA 231) or the Multi-Engine Rating added to their Commercial Pilot Certificate (ASA 223).

Completion Requirements

Simple Requisites

Requirements

Professional Pilot Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ASA111 - Private Pilot-Flight Theory
- ASA112 - Private Pilot Practical
- ASA117 - Aviation Meteorology
- ASA121 - Instrument Flight Theory
- ASA122 - Instrument Airplane Practical
- ASA126 - Crew Resource Management
- ASA127 - Aircraft Systems
- ASA211 - Commercial Flight Theory
- ASA212 - Commercial Pilot Airplane I
- ASA214 - Commercial Airline Pilot II
- ASA215 - Aerodynamics
- ASA217 - Aviation Laws and Regulations
- ASA219 - Air Carrier Operations
- ASA226 - Aircraft Safety
- ASA230 - Flight Inst. Theory (Airplane)
- ASA231 - Cert. Flight Instructor (ASEL)
  OR ASA223 - Comm Pilot Multi-engine

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
  OR ENG107 - Writing in the Workplace
  OR ENG108 - Creative Nonfiction
- MAT130 - Industrial Mathematics
  OR MAT165 - College Trigonometry
- PHY110 - Elements of Physics
  OR PHY201 - Introduction to Physics I

Electives

Complete ALL of the following Course Sets:

- General Education Electives
- Social Science Electives
- Social Science Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ASA 111	Private Pilot – Flight Theory	3
ASA 112	Private Pilot Practical	2
ASA 117	Aviation Meteorology	3
MAT 130	Industrial Mathematics	3
or MAT 165*	College Trigonometry	
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**14**
	SECOND SEMESTER	
ASA 121	Instrument Flight Theory	3
ASA 122	Instrument Practical	2
ASA 126	Crew Resource Management	3
ASA 127	Aircraft System	3
PHY 110**	Elements of Physics	4
or PHY 201**	Fundamentals of Physics	
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
ASA 211	Commercial Pilot Theory	3
ASA 212	Commercial Pilot Airplane I	2
ASA 215	Aerodynamics	3
ASA 217	Aviation Laws and Regulations	3
ENG 107	Writing in the Workplace	3
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
ASA 214	Commercial Pilot Airplane II	2
ASA 219	Air Carrier Operations	2
ASA 226	Aviation Safety	3
ASA 230	Flight Instructor Theory	3
Elective	Social Science	3
	SEMESTER TOTAL	**13**
	SUMMER SESSION	
ASA 231	Certified Flight Instructor	2
or ASA 223	Commercial Pilot Multi-Engine	1
Elective	Social Science	3
Elective	General Education	3
	SEMESTER TOTAL	**7-8**

	TOTAL CREDITS	**63-64**

AVS - Aviation Science A.A.S.

Overview

Program Full Description

The Aviation Science degree permits the student with an interest in aviation to experience a blend of pilot and management studies. The degree combines the earning of the Federal Aviation Administration (FAA) Private Pilot certificate with the study of more advanced pilot courses, business courses, computers, and liberal arts courses. Students who decide on a career as a pilot while or after earning this degree are eligible to enter the Professional Pilot program and add to their pilot credentials. Graduates holding this degree may be hired for ground-based employment with fixed-base operators, municipal airport authorities, airlines, flight schools, state aviation agencies, the federal government, corporate flight departments, aviation-related sales, or general business concerns. An FAA medical certificate is required for enrollment. The granting of this degree is based upon the student's successful completion of the required coursework and the obtaining of the FAA Private Pilot certificate. Graduates of this program can seek employment as airport managers, fixed-base operator

Advisor Notes

Two failures of the same flight theory or flight practical course will result in the student being removed from further advancement within the degree program.

Completion Requirements

Simple Requisites

Requirements

Aviation Science Requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ACC161 - Principles of Accounting II
- ASA111 - Private Pilot-Flight Theory
- ASA112 - Private Pilot Practical
- ASA117 - Aviation Meteorology
- ASA126 - Crew Resource Management
- ASA127 - Aircraft Systems
- ASA215 - Aerodynamics
- ASA217 - Aviation Laws and Regulations
- ASA226 - Aircraft Safety
- BUS211 - Principles of Management

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
  OR ENG107 - Writing in the Workplace
  OR ENG108 - Creative Nonfiction
- ENG111 - Speech
  OR CMN120 - Small Group Communication
- CIS105 - Introduction to Computers and Applications
- MAT130 - Industrial Mathematics
- PHY110 - Elements of Physics

Math 130 must be completed prior to Physics 110

Electives

Complete ALL of the following Course Sets:

- Business Electives
- General Education Electives
- Social Science Electives
  OR Humanities Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

	FIRST SEMESTER	
ASA 111	Private Pilot – Flight Theory	3
ASA 112	Private Pilot Practical	2
ASA 117	Aviation Meteorology	3
ENG 105	Research and Composition	3
MAT 130*	Industrial Mathematics	3
	SEMESTER TOTAL	**14**
	SECOND SEMESTER	
ENG 106	Introduction to Literature	
Or ENG 107	Writing in the Workplace	
Or ENG 108	Creative Nonfiction	3
ASA 126	Crew Resource Management	3
ASA 127	Aircraft Systems	3
CIS 105	Introduction to Computers and Applications	3
PHY 110*	Elements of Physics	4
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
ASA 215	Aerodynamics	3
ASA 217	Aviation Laws and Regulations	3
ACC 160	Principles of Accounting I	3
ENG 111	Speech	
Or CMN 120	Small Group Communication	3
Elective	ACC, AOT, BUS, or CIS	3
	SEMESTER TOTAL	**18**
	FOURTH SEMESTER	
ACC 161	Principles of Accounting II	3
ASA 226	Aviation Safety	3
Electives	Social Science/Humanities	6
Elective	General Education	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**63**

BIOS - Biology A.S.

Overview

Program Full Description

The Biology program is intended for students who plan to transfer in the following areas of study: Allied Health, Biochemistry, Biology, Biomechanical Engineering, Chiropractic, Dentistry, Ecology, Environmental Biology, Genetics, Marine Biology, Medical Technology, Medicine, Molecular Biology, Optometry, Pharmacy, Veterinary Medicine, or related areas.

Advisor Notes

Students should consult their advisor and transfer four-year college or university for the most appropriate course. Students interested in pursuing continued education in plant science or horticulture should speak to a faculty advisor and check with the transfer institution about appropriate electives.

Completion Requirements

Simple Requisites

Requirements

Biology A.S. Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- BIO110 - General Biology I
- BIO111 - General Biology II
- CHE111 - General Chemistry I
- CHE112 - General Chemistry II
- CHE205 - Organic Chemistry I
- CHE206 - Organic Chemistry II

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- ENG111 - Speech

Electives

Complete ALL of the following Course Sets:

- Biology Elective
- Biology Elective
- Humanities Electives
- Humanities Electives
- Mathematics Elective
- Mathematics Elective
- Mathematics Elective
  OR Science Electives
- Social Science Electives
- Social Science Electives

- Biology Elective: Students must select BIO 137, BIO 205, BIO 218, or BIO 220.
- Mathematics Elective: MAT courses must be 150 or higher. MAT 188 and MAT 250, 251 may not be used to fulfill this requirement
- Science Elective: (AST, BIO, CHE, PHY) must be numbered higher than 112.

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BIO 110	General Biology I	4
CHE 111	General Chemistry I	4
ENG 105	Research and Composition	3
Elective	Mathematics	3-4
ENG 111	Speech	3
	SEMESTER TOTAL	**17-18**
	SECOND SEMESTER	
BIO 111	General Biology II	4
CHE 112	General Chemistry II	4
ENG 106	Introduction to Literature	3
Elective	Mathematics	3-4
Elective	Social Science	3
	SEMESTER TOTAL	**17-18**
	THIRD SEMESTER	
CHE 205	Organic Chemistry I	4
Elective	Biology	4
Elective	Humanities	3
Elective	Mathematics/Science	3-4
	SEMESTER TOTAL	**14-15**
	FOURTH SEMESTER	
CHE 206	Organic Chemistry II	4
Elective	Biology	4
Elective	Social Science	3
Elective	Humanities	3
	SEMESTER TOTAL	**14**
	TOTAL CREDITS	**62**

BMG - Business Management A.A.S.

Overview

Program Full Description

The Business Management Associate Degree program is accredited by the Accreditation Council of Business Schools and Programs (ACBSP). This program is designed to provide the student with a knowledge of general business procedures and other areas which will contribute to preparation to enter business as an owner, customer service representative, sales representative, assistant manager or supervisor trainee.

Advisor Notes

- Students should take BUS 109 in the first semester.
- Credit will not be given toward graduation requirements for both MAT 150 and BUS 150.

Completion Requirements

Simple Requisites

Requirements

Business Management A.A.S.
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ACC160 - Principles of Accounting I
- ACC161 - Principles of Accounting II
- AOT112 - Keyboarding I
- BUS109 - Business as a Major
- BUS120 - Intro to Business Organization
- BUS209 - Business Communications
- BUS211 - Principles of Management
- BUS221 - Principles of Marketing
- BUS241 - Business Law I
- BUS252 - Human Resources Management
- BUS284 - Business Internship
  OR BUS285 - Global Business Practice Firm
- CIS110 - Business Information Systems
- ECO201 - Principles of Macroeconomics
- ECO202 - Principles of Microeconomics

Placement testing is available for AOT 112.

General Education Requirements

Complete ALL of the following Courses:

- CIS105 - Introduction to Computers and Applications
- ENG105 - Research and Composition
- ENG107 - Writing in the Workplace
  OR ENG106 - Introduction to Literature
- IDS105 - Think, Prob Solv, Team Buildin

Electives

Complete ALL of the following Course Sets:

- Free Elective
- Mathematics Elective
- Science Electives

Recommended Math Electives: MAT 118, 150, 155, and 160.

Recommended Free Elective: Any AOT; any BUS; ACC 203,205; CIS 111; ENG 111; HRM 210; PSY 142.

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ACC 160	Principles of Accounting I	3
BUS 109	Business as a Major	1
BUS 120	Introduction to Business Organization	3
CIS 105	Introduction to Computer Science and Applications	3
ENG 105	Research and Composition	3
Elective+	Mathematics	3-4
	SEMESTER TOTAL	**16-17**
	SECOND SEMESTER	
ACC 161	Principles of Accounting II	3
AOT 112*	Keyboarding I	1
BUS 221	Principles of Marketing	3
ENG 107**	Writing in the Workplace	3
IDS 105	Thinking, Problem Solving, and Team Building	3
	SEMESTER TOTAL	**13**
	THIRD SEMESTER	
BUS 209	Business Communications	3
BUS 211	Principles of Management	3
BUS 241	Business Law I	3
ECO 201	Principles of Macroeconomics	3
Elective¨	Free Elective	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
BUS 252	Human Resource Management	3
BUS 284	Business Internship	
or BUS 285	Global Business Practice Firm	4-6
ECO 202	Principles of Microeconomics	3
CIS 110	Business Information Systems	3.5
Elective	Science	3-4
	SEMESTER TOTAL	**16.5-19.5**
	TOTAL CREDITS	**60.5**

BMGC - Business Management Certificate

Overview

Program Full Description

This program introduces students to various aspects of business management and will qualify them to obtain entry-level management positions as customer service representatives, sales representatives, management-trainees or to become business owners. Credits may be applied toward the A.A.S. degree in Business Management.

Advisor Notes

Recommended electives: Recommended elective: Any AOT; any BUS; CIS 110, 111; CMN 110; ENG 105, 111; MAT 118 or higher; PSY 142

Placement testing is available for AOT 112.

*Recommended elective: Any AOT; any BUS; CIS 110, 111; CMN 110; ENG 105, 111; MAT 118 or higher; PSY 142

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	SUMMER	
AOT 112*	Keyboarding I	1
CIS 105	Introduction to Computer Science and Applications	3
BUS 120	Introduction to Business Organization	3
	SEMESTER TOTAL	**7**
	FIRST SEMESTER (FALL)	
ACC 160	Principles of Accounting I	3
BUS 209	Business Communications	3
BUS 211	Principles of Management	3
Elective**	Free Elective	3
	SEMESTER TOTAL	**12**
	SECOND SEMESTER (SPRING)	
ACC 161	Principles of Accounting II	3
BUS 221	Principles of Marketing	3
BUS 241	Business Law I	3
BUS 252	Human Resource Management	3
	SEMESTER TOTAL	**12**
	TOTAL CREDITS	**31**

BUAA - Business Administration A.A.

Overview

Program Full Description

The Business Administration Associate Degree program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). Designed to prepare graduates to continue their studies in accounting, economics, management, finance, insurance, marketing, supply chain management/logistics or business administration at a four-year college or university.

Advisor Notes

Students should take BUS 109 in the first semester. Students should consult four-year colleges regarding transferability of courses in this program. Transfer information is available on the LCCC website. For more information, contact an academic advisor. Credit will not be given towards graduation requirements for both MAT 150 and BUS 150.

Completion Requirements

Simple Requisites

Requirements

Business Administration Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ACC160 - Principles of Accounting I
- ACC161 - Principles of Accounting II
- ACC203 - Cost/Managerial Accounting
- BUS109 - Business as a Major
- BUS211 - Principles of Management
- BUS221 - Principles of Marketing
- BUS241 - Business Law I
- BUS256 - International Business
  OR ECO237 - International Relations
- ECO201 - Principles of Macroeconomics
- ECO202 - Principles of Microeconomics
- MAT188 - Business Calculus
  OR MAT191 - Calculus & Analytic Geometry I
- MAT150 - Intro Probability & Statistics
  OR BUS150 - Business Statistics

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- ENG111 - Speech

Electives

Complete ALL of the following Course Sets:

- Free Elective
- Humanities Electives
- Humanities Electives
  OR Social Science Electives
- Lab Sciences

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

	FIRST SEMESTER	
ACC 160	Principles of Accounting I	3
BUS 109	Business as a Major	1
BUS 211	Principles of Management	3
CIS 105	Introduction to Computers and Applications	3
ENG 105	Research and Composition	3
Elective	Humanities	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
ACC 161	Principles of Accounting II	3
BUS 221	Principles of Marketing	3
ENG 106	Introduction to Literature	3
MAT 150	Introduction to Probability and Statistics	3
or BUS 150	Business Statistics	3-3.5
Elective	Humanities/Social Science	3
	SEMESTER TOTAL	**15-15.5**
	THIRD SEMESTER	
ACC 203	Cost/Managerial Accounting	3
BUS 241	Business Law	3
ECO 201	Principles of Macroeconomics	3
ENG 111	Speech	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
BUS 256	International Business	
or ECO/PSC 237	International Relations	3
ECO 202	Principles of Microeconomics	3
MAT 188	Business Calculus	
or MAT 191	Calculus & Analytic Geometry I	3-4
Electives	Free Electives	4-6
	SEMESTER TOTAL	**13-16**
	TOTAL CREDITS	**60**

CGA - Computer-Generated Animation and Digital Arts A.A.S.

Overview

Program Full Description

This program is designed for students interested in the animation and digital arts industries. Potential career paths in this field include, but are not limited to, animator, 3D modeler, visual effects artist, photographic and video compositor, and motion graphics artist. Students are given a foundation in traditional art, as well as focused education in the digital arts, utilizing industry-standard software, hardware and production techniques to gain practical experience producing digital artwork, whether static or in motion. While some students may pursue the program of study in order to transfer to other institutions, the degree is designed to allow for portfolio development, leading to entry-level employment in the digital arts field. If students do wish to seek transfer to a four-year college or university, they should contact the potential transfer institution and an advisor to help determine scheduling choices.

Advisor Notes

Students who plan to transfer are urged to consult with their faculty advisor or an academic counselor to ensure that the courses selected meet LCCC requirements and those of the four-year college or university which transfer is intended. Students who do not plan to transfer are urged to consult with their faculty advisor or an academic counselor to assist with the selection of electives.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ART 107	Digital Design	3
CIS 112	Computational Thinking and Programming Logic	2
ART 108	Two-Dimensional Design	3
ART 111	Color Theory	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**14**
	SECOND SEMESTER	
ART 132	Principles of 3D Modeling and Texturing	3
Elective	Physics	4-5
ART 110	Drawing I	3
SOC 155	Mass Culture	3
ENG 107	Writing in the Workplace	3
	SEMESTER TOTAL	**16-17**
	THIRD SEMESTER	
ART 109	Motion Graphics	3
ART 247	Introduction to Animation	3
ART 181	Advanced 3D Modeling and Texturing	3
Elective	Social Science/Humanities	3
Elective*	Mathematics	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
ART 251	Character Rigging and Animation	3
ART 252	Computer Generated Dynamic Simulations	3
DMP 116	Sound Design for Animation	3
Elective♦	Digital Arts Elective	3
Elective+	General Education	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**60**

CGPS - Computer Game and Simulation Development - Programming Track A.S.

Overview

Program Full Description

This degree is designed for students preparing to enter a program leading to a baccalaureate degree at a four-year college or university. Game design and development course work along with programming skills in scripting languages, C++, and Objective-C may lead the graduate into programs of study including Game Programming and Simulation Development, Computer Science, Information Systems, or other technology degrees. Students utilize industry-standard development environments, two-dimensional graphics software, scripting languages, as well as two- and three dimensional game engines to develop games and simulations in a team environment for both the personal computer and mobile platforms. Effective project management techniques are used as games are developed collaboratively.

Advisor Notes

Students should consult the catalog of the four year college or university to which he or she plans to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer Center. For more information, contact a faculty advisor or counselor.

Completion Requirements

Simple Requisites

Requirements

Computer Game and Simulation Development - Programming Track A.S. requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ART107 - Digital Design
- ART118 - 2D Game & Simulation Graphics
- CIS105 - Introduction to Computers and Applications
- CIS112 - Computation Think & Prog Logic
- CIS114 - Introduction to Game Design
- CIS118 - Game & Simulation Program Fund
- CIS119 - College Survival Bootcamp
- CIS133 - User Experience Design
- CIS155 - Intro Comp Sci-Struc Prog C++
- CIS165 - Data Structures
- CIS180 - Introduction to Project Mgmt
- CIS181 - 3D Game & Simulation Program
- DMP116 - Sound Design for Animation

General Education

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- PHY101 - Conceptual Physics
  OR PHY110 - Elements of Physics
  OR PHY103 - Fundamental of Physics
  OR PHY210 - General Physics I

Electives

Complete ALL of the following Course Sets:

- Humanities Electives
  OR Social Science Electives
- Humanities Electives
  OR Social Science Electives
- Mathematics Elective

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ART 107	Digital Design	3
CIS 105	Introduction to Computers and Applications	3
CIS 112	Computational Thinking and Programming Logic	3
CIS 119	College Survival Boot camp	1
CIS 180	Introduction to Project Management	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
ART 118	2D Game and Simulation Graphics	3.5
CIS 118	Game and Simulation Programming Fundamentals	3.5
CIS 133	User Experience Design	3
ENG 106	Introduction to Literature	3
Elective*	Mathematics	3-4
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
CIS 114	Introduction to Game Design	3
CIS 155	Introduction to Computer Science – Structured Programming C++	3
CIS 181	3D Game and Simulation Programming	3.5
Elective	Humanities/Social Science	3
	SEMESTER TOTAL	**12.5**
	FOURTH SEMESTER	
Elective	Physics	4-5
DMP 116	Sound Design for Animation	3
CIS 165	Data Structures – C++	3.5
Elective	Humanities/Social Science	6
	SEMESTER TOTAL	**16.5-17.5**
	TOTAL CREDITS	**61**

CGSA - Computer Game and Simulation Development - Digital Arts Track A.A

Overview

Program Full Description

The degree is designed for students interested in the computer video game and simulation industries or related fields. Program work introduces students to core principles of game design, along with a strong foundation in the digital arts concepts and techniques necessary to create artistic assets. This degree can be used for transfer to a 4-year institution or to prepare graduates for entry-level work in a variety of positions including, but not limited to, animator, 2D sprite artist, 3D modeler, texture artist, character

rigger, game-environment designer, and user experience designer. Students utilize industry-standard software and game engines, produce game assets and animations, and gain practical experiences working with programming students in team environments to produce game and simulation projects. Effective project managements techniques are used as games are developed collaboratively. Skills learned in this degree may be leveraged into other artistic careers or fields of study.

Completion Requirements

Simple Requisites

Requirements

Computer Game and Simulation Development - Digital Arts Track A.A. requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ART107 - Digital Design
- ART110 - Drawing I
- ART118 - 2D Game & Simulation Graphics
- ART132 - Prin of 3D Modeling & Texture
- ART251 - Character Rigging & Animation
- ART181 - Adv 3D Modeling & Texturing
- ART247 - Intro to Animation
- CIS105 - Introduction to Computers and Applications
- CIS112 - Computation Think & Prog Logic
- CIS114 - Introduction to Game Design
- CIS118 - Game & Simulation Program Fund
- CIS133 - User Experience Design
- CIS180 - Introduction to Project Mgmt
- DMP116 - Sound Design for Animation

General Education

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- PHY101 - Conceptual Physics
  OR PHY110 - Elements of Physics
  OR PHY103 - Fundamental of Physics
  OR PHY210 - General Physics I

Electives

Complete ALL of the following Course Sets:

- Humanities Electives
  OR Social Science Electives
- Humanities Electives
  OR Social Science Electives
- Mathematics Elective

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ART 107	Digital Design	3
ART 110	Drawing I	3
CIS 105	Introduction to Computers and Applications	3
CIS 112	Computational Thinking and Programming Logic	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
ART 118	2D Game and Simulation Graphics	3.5
ART 132	Principles of 3D Modeling and Texturing	3
CIS 118	Game and Simulation Programming Fundamentals	3.5
CIS 133	User Experience Design	3
ENG 106	Introduction to Literature	3
	SEMESTER TOTAL	**16**
	SUMMER SESSION	
Elective	Humanities/Social Science	3
	SEMESTER TOTAL	**3**
	THIRD SEMESTER	
ART 181	Advanced Modeling 3D Modeling and Texturing	3.5
ART 247	Introduction to Animation	3
CIS 114	Introduction to Game Design	3
CIS 180	Introduction to Project Management	3
Elective	Mathematics	3-4
	SEMESTER TOTAL	**15.5**
	FOURTH SEMESTER	
ART 251	Character Rigging and Animation	3
DMP 116	Sound Design for Animation	3
Elective	Physics	4-5
Elective	Humanities/Social Science	6
	SEMESTER TOTAL	**16-17**
	TOTAL CREDITS	**65.5**

CHMS - Chemistry A.S. (CHMS)

Overview

Program Full Description

The Chemistry program is intended for students who plan to transfer in the following areas of study: Biochemistry, Chemistry, Chemical Engineering, Environmental Science, Geology, Medicine, Veterinary Medicine, or related areas.

Completion Requirements

Simple Requisites

Requirements

Chemistry Requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- BIO110 - General Biology I
- BIO111 - General Biology II
- CIS155 - Intro Comp Sci-Struc Prog C++
- CHE205 - Organic Chemistry I
- CHE206 - Organic Chemistry II
- CHE111 - General Chemistry I
- CHE112 - General Chemistry II
- MAT191 - Calculus & Analytic Geometry I
- MAT196 - Calc & Analytic Geometry II
- MAT201 - Calc & Analytic Geometry III
- PHY210 - General Physics I
- PHY215 - General Physics II

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature

Electives

Complete ALL of the following Course Sets:

- Humanities Electives
- Humanities Electives
- Social Science Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CHE 111	General Chemistry I	4
MAT 191	Calculus and Analytic Geometry I	4
ENG 105	Research and Composition	3
Elective	Humanities	3
Elective	Social Science	3
	SEMESTER TOTAL	**17**
	SECOND SEMESTER	
CHE 112	General Chemistry II	4
MAT 196	Calculus and Analytic Geometry II	4
PHY 210	General Physics I	4
ENG 106	Introduction to Literature	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
CHE 205	Organic Chemistry I	4
BIO 110	General Biology I	4
PHY 215	General Physics II	4
MAT 201	Calculus and Analytic Geometry III	4
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
CHE 206	Organic Chemistry II	4
BIO 111	General Biology II	4
CIS 155	Intro to Computer Science Structured Programming C++	3
Elective	Social Science/Humanities (200 or above)	3
	SEMESTER TOTAL	**14**
	TOTAL CREDITS	**62**

CHT - Chemical Technology A.A.S.

Overview

Program Full Description

This program prepares students to work with chemicals and chemical instrumentation safely and effectively. Graduates are qualified to enter the chemical industry as chemical laboratory technicians. With experience, supervisory positions in the chemical industry may be assumed.

Completion Requirements

Simple Requisites

Requirements

Chemistry A.A.S. Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- CHE107 - Chemical & Lab Safety
- CHE111 - General Chemistry I
- CHE112 - General Chemistry II
- CHE205 - Organic Chemistry I
- CHE206 - Organic Chemistry II
- CHE209 - Polymer Chemistry
- CHE211 - Instr & Quantitative Analysis
- CHE212 - Instru & Quantitative Analy II
- PHY110 - Elements of Physics

General Education Requirements

Complete ALL of the following Courses:

- CIS105 - Introduction to Computers and Applications
- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- MAT150 - Intro Probability & Statistics
- MAT160 - College Algebra

Electives

Complete ALL of the following Course Sets:

- Social Science Electives
  AND Humanities Electives
- Social Science Electives
  AND Humanities Electives
- Free Elective
- Free Elective

Recommend ENG 111

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CHE 111	General Chemistry I	4
CIS 105	Intro to Computers and Applications	3
MAT 160	College Algebra	3
ENG 105	Research and Composition	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
CHE 112	General Chemistry II	4
MAT 150	Intro to Probability and Statistics	3
PHY 110	Elements of Physics	4
ENG 106	Introduction to Literature	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
CHE 205	Organic Chemistry I	4
CHE 107	Chemical and Laboratory Safety	2
CHE 211	Instrumental and Quantitative Analysis I	4
Elective	Free Elective	3
	SEMESTER TOTAL	**13**
	FOURTH SEMESTER	
CHE 206	Organic Chemistry II	4
CHE 209	Polymer Chemistry	3
CHE 212	Instrumental and Quantitative Analysis II	4
Elective	Free Elective	3
	SEMESTER TOTAL	**14**
	TOTAL CREDITS	**60**

CISS - Computer Science A.S.

Overview

Program Full Description

This program is intended for students who wish to transfer to a four-year college or university for a bachelor's degree in Computer Science or Computer Information Science. This program is compliant with the PA statewide program-to-program articulation agreement which ensures that students who complete the requirements as stated below will have their coursework and credits transfer into a parallel baccalaureate program at participating institutions with full junior standing and without the need for course-by-course equivalency.

Advisor Notes
Required Electives Mathematics credit will not be given toward graduation requirement for both MAT 150 and BUS 150 Social Science Electives must be chosen from: ECO 201, 202; PSC 141; PSY 140, 145, 240, 242; SOC 150, 151, 258 Laboratory Science Electives must be chosen in sequence from: BIO 110 and 111; or BIO 163 and 164; or CHE 111 and 112; or PHY 201 and 202; or PHY 210 and 215. Humanities Electives must be chosen from: ART 101; ENG 154, 201, 202, 205, 206, 210, 211; FRN 105, 106; GRM 105, 106; HIS 123,124, 130, 131; MUS 101; PHI 201, 205; SPN 105, 106.

Completion Requirements

Simple Requisites

Requirements

Computer Science A.S. requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- CIS105 - Introduction to Computers and Applications
- CIS119 - College Survival Bootcamp
- CIS155 - Intro Comp Sci-Struc Prog C++
- CIS165 - Data Structures
- CIS225 - Computer Organization & Arch
- CIS250 - Operating Systems
- CIS255 - The Database Environment

General Education

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- ENG111 - Speech
- MAT150 - Intro Probability & Statistics
  OR BUS150 - Business Statistics
- MAT191 - Calculus & Analytic Geometry I
- MAT196 - Calc & Analytic Geometry II
- MAT203 - Discrete Mathematics

Electives

Complete ALL of the following Course Sets:

- Humanities Electives
- Lab Sciences
- Lab Sciences
- Social Science Electives
- Social Science Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CIS 105	Introduction to Computers and Applications	3
CIS 119	College Survival Bootcamp	1
CIS 155	Introduction to Computer Science –Structured Programming-C++	3.5
ENG 105	Research and Composition	3
MAT 191	Calculus and Analytic Geometry I	4
	SEMESTER TOTAL	**14.5**
	SECOND SEMESTER	
CIS 225	Computer Organization and Architecture	3
CIS 250	Operating Systems	3
ENG 106	Introduction to Literature	3
MAT 196	Calculus and Analytic Geometry II	4
Elective	Laboratory Science	4
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
CIS 165	Data Structure –C++	3.5
CIS 255	Database Environment	3.5
Elective	Social Science	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
MAT 150	Introduction to Probability and Statistics	3-3.5
Or BUS 150	Business Statistics	
ENG 111	Speech	3
MAT 203	Discrete Mathematics	3
Elective	Humanities	3
Elective	Social Science	3
	SEMESTER TOTAL	**15-15.5**
	TOTAL CREDITS	**60.5**

CJA - Criminal Justice Administration A.A.S.

Overview

Program Full Description

The purpose of this program is to provide knowledge about the management, organization, and operation of the criminal justice system, with emphasis on law enforcement and correctional agencies. In conjunction with a study of the entire criminal justice system, the student may elect enforcement or correction courses, depending upon his or her objective.Graduates of the program may qualify for employment in local, state, and some federal law enforcement and corrections agencies, or continue their education at a four-year college or university.Jobs for which graduates are expected to be qualified include local and county police officer, state trooper, police detective, federal and

state security officer, liquor control agent, drug enforcement officer, private detective, commercial and retail security officer, and corrections officer.
Advisor Notes
Required Electives
Program-specific electives a student must choose from
General Education electives a student must choose from

Recommended Electives
CJA 104, CJA106, CJA 214, CJA232, CJA234; NOTE: CJA105, CJA116, CJA215, or CJA225 may also be used as CJA electives if not selected for the main CJA course criteria.
General Education electives a student may choose from

Program Notes
CED 272 may be taken for degree credit in this program.

Students wishing to qualify for employment in law enforcement should take CJA 105 and 215. Students wishing to qualify for employment in corrections agencies should take CJA 116 and 225.

Students wishing to transfer to a four-year college or university should take ENG 106.

Students should consult four-year college or university catalogs for the transferability of suggested CJA electives.

Completion Requirements

Simple Requisites

Requirements

Criminal Justice AAS Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- CJA101 - Intro to Criminal Justice Sys
- CJA105 - Criminal Investigations
  OR CJA116 - Corrections Administration
- CJA119 - Juvenile Justice
- CJA201 - Crim Evidence & Court Proc
- CJA215 - Law Enforcement & Society
  OR CJA225 - Probation and Parole
- CJA240 - Criminal Law
- SOC250 - Criminology

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
  OR ENG107 - Writing in the Workplace
- ENG111 - Speech
- PSC141 - American Federal Government
  OR PSC235 - Constitutional Law
- PSC142 - State and Local Government
- PSY140 - Introduction to Psychology
- SOC150 - Introduction to Sociology
- SOC151 - Modern Social Problems

Electives

Earn at least 6 credits from the following:

- Mathematics Elective
  OR Science Electives

Electives

Earn at least 9 credits from the following:

- Criminal Justice Electives

CJA 105, 116, 215, or 225 may also be used for this requirement if not used for program requirements.

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

	FIRST SEMESTER	
CJA 101	Introduction to the Criminal Justice System	3
CJA 105	Criminal Investigations	3
Or CJA 116	Corrections Administration	3
ENG 105	Research and Composition	3
SOC 150	Introduction to Sociology	3
ENG 111	Speech	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
CJA 119	Juvenile Justice	3
ENG 106	Introduction to Literature	
Or ENG 107	Writing in the Workplace	3
PSY 140	Introduction to Psychology	3
Elective	Criminal Justice Administration	3
Elective	Mathematics/Science	3-4
	SEMESTER TOTAL	**15-16**
	THIRD SEMESTER	
CJA 215	Law Enforcement and Society	3
Or CJA 225	Probation and Parole	
CJA 240	Criminal Law	3
PSC 141	American Federal Government	3
Or PSC 235	Constitutional Law	
SOC 151	Modern Social Problems	3
Elective	Mathematics/Science	3-4
	SEMESTER TOTAL	**15-16**
	FOURTH SEMESTER	
CJA 201	Criminal Evidence and Court Procedure	3
PSC 142	State and Local Government	3
SOC 250	Criminology	3
Electives	Criminal Justice Administration	6
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**60**

CJAA - Criminal Justice Administration A.A.

Overview

Program Full Description

The purpose of this transfer program is to provide knowledge about the management, organization and operation of the criminal justice system, with emphasis on law enforcement and correctional agencies. In conjunction with a study of the entire criminal justice system, the student may elect law enforcement or corrections courses, depending upon his/her career objectives.

Advisor Notes

Students wishing to qualify for employment in law enforcement should take CJA 105 and CJA 215. Students wishing to qualify for employment in corrections agencies should take CJA 116 and CJA 225. Required Electives Requirements/Recommendations *Mathematics Electives must be selected from this list: MAT 105, 120, 125, 126, 150, 155, 160, 165, 170, 191, 196 **Lab Science Electives must be selected from this list: BIO 101, 105, 110, 111, 163, 164 or; CHE 105, 106, 108, 111, 112 or; PHY 101, 103, 201, 202, 210, 215 ***Humanities Electives must be selected from this list: ART 101, ENG 154, 201, 202, 205, 206, 210, 211, FRN 105, 106, GRM 105, 106, MUS 101, PHI 201, 205, SPN 105, 106 Program-specific electives a student must choose from General Education electives a student must choose from Recommended Electives Program-specific electives a student may choose from General Education electives a student may choose from

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CJA 101	Introduction to Criminal Justice System	3
CJA 116	Corrections Administration	3
ENG 105	Research Composition	3
SOC 150	Introduction to Sociology	3
ENG 111	Speech	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
CJA 119	Juvenile Justice	3
ENG 106	Introduction to Literature	3
PSY 140	Introduction to Psychology	3
Elective	Mathematics	3-4
Elective	Laboratory Science	4
	SEMESTER TOTAL	**16-17**
	THIRD SEMESTER	
CJA 201	Criminal Evidence and Court Procedure	3
CJA 215	Law Enforcement and Society	3
PSC 130	Introduction to Political Science	3
Elective	Humanities	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
CJA 234	Ethics in Criminal Justice	3
SOC 250	Criminology	3
Elective	Mathematics	3-4
Elective	Humanities	3
Elective	Humanities	3
	SEMESTER TOTAL	**15-16**
	TOTAL CREDITS	**62**

CMMA - Communication A.A.

Overview

Program Full Description

This program is designed to prepare students in various Communication fields for careers in: organizational and public communication, such as advertising, public relations, event planning, public affairs, corporate communication, politics/government, international relations, and pre-law; speech communication and communication studies, such as counseling, communication education, human resources, theatre, on-air broadcaster performance; and in professional writing such as journalism and media writing.While some students may pursue a program of study for personal enrichment rather than transfer, the degree is designed for students preparing to enter a program leading to a baccalaureate degree at a four-year college or university.

Advisor Notes

Required Electives Program-specific electives a student must choose from General Education electives a student must choose from Recommended Electives Literature Elective: ENG 201 or higher (not ENG 225 or 235) Mathematics Elective: MAT 150 Social Science Elective: PSY 140; SOC 150, 151, 155 Humanities Electives: World Languages General Education Electives: MUS 101, 110 Program Notes Students should consult their advisor and transfer four-year college or university for the most appropriate course. Preparation for fields in professional writing such as journalism, publishing, media writing, speech writer, critic ○ CMN 101 Introduction to Media Communications o CMN 108 Introduction to Public Relations o CMN 113 TV Studio Production o CMN 115 Argumentation & Debate ○ CMN 118 Media Scriptwriting ○ CMN 204 Video Field Production ○ ENG/CMN 225 Journalism o CMN 230 Newspaper Production ○ ENG 235 Creative Writing Preparation for fields in speech communication and communication studies such as counseling, communication education, human resources, theatre, on-air broadcaster performance, recruiter. ○ ART 190 Dance o CMN 101 Introduction to Media Communications o CMN 113 TV Studio Production ○ CMN 115 Argumentation & Debate ○ CMN 118 Media Scriptwriting ○ CMN 120 Small Group Communication ○ CMN 125 Introduction to Theatre o CMN 130 Acting I o CMN190 Theatre Production o CMN191 Theatre Practicum o ENG 111 Speech o ENG/CMN 225 Journalism o MUS 190 Voice Ensemble Preparation for fields in organizational and public communication such as advertising, public relations, event planning, public affairs, corporate communication, politics/government, international relations, pre- law ○ BUS 209 Business Communications ○ BUS 141 Principles of Advertising ○ CMN 120 Small Group Communication ○ CMN 115 Argumentation & Debate ○ CMN 101 Introduction to Media Communications ○ CMN 118 Media Scriptwriting ○ ENG 111 Speech ENG/CMN 225 Journalism

Completion Requirements

Simple Requisites

Requirements

Communication A.A. requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- CMN105 - Interpersonal Communication
- CMN112 - Oral Communica & Presentation
- CMN201 - Intercultural Communication
- CMN121 - Intro to Communication Theory
- DMP250 - Communications Media Practicum

Option for DMP 250 - additional Communication course

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature

Electives

Complete ALL of the following Course Sets:

- Communication - Professional Writing
  OR Communication - Public Relations
  OR Communication - Speech Communication
- Communication - Professional Writing
  OR Communication - Public Relations
  OR Communication - Speech Communication
- General Education Electives
- General Education Electives
- Humanities Electives
- Literature Elective
- Social Science Electives
- Social Science Electives

- Free Elective
- Free Elective

Complete ALL of the following Course Sets:

No selection provided

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CMN 105	Interpersonal Communication	3
CMN 112	Oral Communication & Presentation	3
ENG 105	Research and Composition	3
Elective*	Social Science	3
Elective□	Mathematics	3-4
	SEMESTER TOTAL	**15-16**
	SECOND SEMESTER	
CMN 201	Intercultural Communication	3
ENG 106	Introduction to Literature	3
Elective*	Social Science	3
Elective	General Education	3
Elective	Free Elective	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
Elective**	Communication	3
Elective	Laboratory Science	4-5
Elective♦	Humanities	3
DMP 250 or Elective	Communications Media Practicum or Communication	3
Elective	Free Elective	3
	SEMESTER TOTAL	**16-17**
	FOURTH SEMESTER	
CMN 121	Intro to Communication Theory	3
Elective●	Literature (ENG courses numbered 201 and above)	3
Elective**	Communication	3
Elective	General Education	6
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**61**

CNAD - Cisco CCNA Diploma

Overview

Program Full Description

This is a Fast-Track CCNA Diploma Program designed for those students interested in pursuing a career as Cisco Systems Networking Specialists. All course work is offered through the internationally recognized Cisco Systems Networking Academy. This program prepares students to take the Cisco CCENT and CCNA certification examinations

Completion Requirements

Simple Requisites

Requirements

Cisco CCNA Diploma requirements
Type
Completion Requirement

Complete ALL of the following Courses:

- NET240 - Implementing Cisco Technology
- NET241 - Administering Cisco Tech
- NET242 - Advanced Cisco Technologies
- NET265 - Capstone for IT Professionals

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
NET 240	Cisco CCNA 200-301 Part 1 (Implementing Cisco Technologies)	3.5
NET 241	Cisco CCNA 200-301 Part 2 (Administering Cisco Technologies)	3.5
	SEMESTER TOTAL	**7**
	SECOND SEMESTER	
NET 242	Cisco CCNA 200-301 Part 3 (Advanced Cisco Technologies)	3.5
NET 265	Capstone for IT Professionals	1
	SEMESTER TOTAL	**4.5**
	TOTAL CREDITS	**11.5**

COM - Construction Management A.A.S.

Overview

Program Full Description
Prepares graduates to be employed in the building construction field. Upon completion of this program, graduates can obtain such positions as contractor, subcontractor, building inspector, project coordinator, construction supervisor, construction manager, and estimator.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
HAC 119	Construction Print Reading	3
MET 104	Manufacturing	3
MAT 160	College Algebra	3
ENG 105	Research and Composition	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
CON 102	Frame Construction Techniques	4
CON 104	Concrete/Masonry Principles	3
ENG 106	Introduction to Literature	
Or ENG 107	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
CON 201	Surveying	3
HAC 160	Residential Wiring	3
PHY 201	Introduction to Physics I	4
CON 105	Architectural Computer Applications	2
CON 204	Construction Codes and Specifications	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
CON 103	Interior/Exterior Finishing	4
CON 202	Construction Estimating	3
CON 210	Construction Practicum	4
CON 220	Construction Management	3
ENG 111	Speech	3
	SEMESTER TOTAL	**17**
	TOTAL CREDITS	**64**

CONC - Construction Technology Certificate

Overview

Program Full Description

Prepares graduates to be employed in the building construction field. Graduates can obtain such positions as contractor, subcontractor, building inspector, project coordinator, or estimator. The courses in this program are specialized and may be applied toward the Construction Technology Associate in Applied Science degree.

Advisor Notes
Program elective may be any additional CON course not listed above

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
HAC 119	Construction Blueprint Reading	3
MET 104	Manufacturing	3
MAT 130	Industrial Mathematics	3
CON 102	Frame Construction Techniques	4
Elective*	Program Elective	3-4
	SEMESTER TOTAL	**16-17**
	SECOND SEMESTER	
MET 111	Computer-Aided Drafting	4
CON 201	Surveying	3
HAC 160	Residential Wiring	3
CON 105	Architectural Computer Applications	2
CON 204	Construction Codes and Specifications	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**31**

COT - Construction Technology A.A.S.

Overview

Program Full Description
Prepares graduates to be employed in the building construction field. Graduates can obtain such positions as contractor, subcontractor, building inspector, project coordinator, and estimator. Students are exposed to various aspects of residential and light commercial buildings. Courses within this program are structured so that students receive both the theory and technical aspects as well as a hands-on approach to solving construction projects. Topics included in this program are layout and design, construction techniques, cost estimation, safety, and construction materials.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
HAC 119	Construction Print Reading	3
MET 104	Manufacturing	3
MAT 130	Industrial Mathematics	3
ENG 105	Research and Composition	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
CON 104	Concrete/Masonry Principles	3
CON 102	Frame Construction Techniques	4
ENG 107	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
CON 201	Surveying	3
HAC 160	Residential Wiring	3
PHY 110	Elements of Physics	4
CON 105	Architectural Computer Applications	2
CON 204	Construction Codes and Specifications	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
CON 103	Interior/Exterior Finishing	4
CON 202	Construction Estimating	3
ENG 111	Speech	3
CON 210	Construction Practicum	4
	SEMESTER TOTAL	**14**
	TOTAL CREDITS	**61**

CRRC - Corrections Certificate

Overview

Program Full Description

The primary purpose of this program is to accommodate in-service officers interested in a specialized field. All courses in this program can be applied to an Associate in Applied Science degree in Criminal Justice Administration. Pre-service students are also eligible to enroll. Specific career opportunities include corrections officer, human services aide, residential juvenile counseling, street outreach counseling, and juvenile corrections aide.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	COURSES	
CJA 101	Introduction to the Criminal Justice System	3
CJA 116	Corrections Administration	3
CJA 119	Juvenile Justice	3
CJA 201	Criminal Evidence and Court Procedure	3
CJA 225	Probation and Parole	3
CJA 240	Criminal Law	3
PSY 140	Introduction to Psychology	3
SOC 151	Modern Social Problems	3
or SOC 250	Criminology	
Electives*	Free Elective	6
	SEMESTER TOTAL	**30**
	TOTAL CREDITS	**30**

CSIS - Computer Information Systems A.S.

Overview

Program Full Description

This program is intended for students who wish to transfer to a four-year college or university for a bachelors degree in Computer Information Systems, Management Information Systems, or related degree. The CIS courses required in the program provide a solid educational foundation in current Information Technology areas. Students are encouraged to consult with an academic advisor, faculty advisor, or counselor when choosing elective courses.

Advisor Notes

Students should consult the catalog of the four year college or university to which he or she plans to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer Center. For more information, contact a faculty advisor or counselor.

Completion Requirements

Simple Requisites

Requirements

Computer Information Systems A.S.
Type
Completion Requirement

Program Electives

Complete ALL of the following Courses:

- BUS120 - Intro to Business Organization
- CIS105 - Introduction to Computers and Applications
- CIS110 - Business Information Systems
- CIS111 - Electronic Commerce
- CIS119 - College Survival Bootcamp
- CIS145 - Systems Analysis & Design
- CIS155 - Intro Comp Sci-Struc Prog C++
- CIS225 - Computer Organization & Arch
- CIS250 - Operating Systems
- CIS255 - The Database Environment
- CIS280 - Obj Oriented Prog Visual Basic

- NET110 - CompTIA Network Essentials

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature

Electives

Complete ALL of the following Course Sets:

- Humanities Electives
  OR Social Science Electives
- Humanities Electives
  OR Social Science Electives
- Lab Sciences
- Mathematics Elective
- Free Elective

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CIS 105	Introduction to Computers and Applications	3
CIS 111	Electronic Commerce	3
CIS 119	College Survival Boot camp	1
Elective*	Mathematics	3-4
BUS 120	Introduction to Business Organization	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**16-17**
	SECOND SEMESTER	
CIS 110	Business Information Systems	3.5
CIS 145	Systems Analysis and Design	3
CIS 225	Computer Organization and Architecture	3
ENG 106	Introduction to Literature	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15.5**
	THIRD SEMESTER	
CIS 155	Introduction to Computer Science – Structured Programming-C++	3
CIS 255	Database Environment	3.5
CIS 280	Object-Oriented Programming with Visual Basic.NET	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**13.5**
	FOURTH SEMESTER	
CIS 250	Operating Systems	3
NET 110	Network Essentials	3
Elective	Free Elective	3.5
Elective	Social Science/Humanities	6
	SEMESTER TOTAL	**15.5**
	TOTAL CREDITS	**60.5**

CSP - Computer Specialist - Programming Concentration A.A.S.

Overview

Program Full Description

Graduates will be prepared to program applications using a variety of computer languages. These applications will be developed for the desktop, the Internet, and mobile devices. In addition, databases will be used to implement applications requiring persistent data. Project management best practices are used for all projects.

Advisor Notes

Required Electives Program-specific electives a student must choose from Mathematics Elective: MAT 105 or higher (except MAT 121)

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CIS 105	Introduction to Computers and Applications	3
CMN 120	Small Group Communication	3
CIS 155	Introduction to Computer Science – Structured Programming-C++	3.5
ENG 105	Research and Composition	3
CIS 112	Computational Thinking and Programming Logic	3
	SEMESTER TOTAL	**15.5**
	SECOND SEMESTER	
CIS 141	Client-Side Scripting I	3.5
CIS 133	User Experience Design	3
ENG 107	Writing in the Workplace	3
CIS 250	Operating Systems	3
Elective*	Mathematics	3
	SEMESTER TOTAL	**15.5**
	THIRD SEMESTER	
CIS 172	Java I	3
CIS 255	The Database Environment	3.5
CIS 280	Object-Oriented Programming with Visual Basic.NET	3
CIS 180	Introduction to Project Management	3
Electives	Social Science/Humanities	3
	SEMESTER TOTAL	**15.5**
	FOURTH SEMESTER	
CIS 207	Unix Server-Side Scripting	3
CIS 145	Systems Analysis and Design	3
CIS 222	Application Development for Mobile Devices	3
Elective	Social Science/Humanities	3
Elective*	Mathematics	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**61.5**

CST - Computer Specialist – Network Technology and Security A.A.S.

Overview

Program Full Description

This program prepares students who are new to the industry or upgrading an existing skill set for jobs in the networking, telecommunications and cyber security fields. Graduates are eligible to take appropriate certification exams and can expect to work as entry-level engineers, administrators, or help desk technicians. The program has a problem-based learning approach that focuses on the needed skills of design, implementation, and troubleshooting to a variety of implementations and platforms such as Microsoft Windows, Linux and Cisco. Our hands-on philosophy starts with ensuring basic understanding from the hardware level up. Students wishing to obtain certifications will gain a solid foundation in the material covered on the following exams:

- Comptia A+, Network+, Linux+ and Security+
- Microsoft Azure Administrator (AZ-104)
- Microsoft Managing Modern Desktops (MD-101)
- Cisco Certified Network Associate (CCNA)
- CEH - Certified Ethical Hacker

Advisor Notes

Students must have access to a Windows 10 or greater computer.

Students intending to transfer to a four-year college or university are advised to consult that institution's catalog to determine the appropriate mathematics and English sequence and transferability of courses.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
NET 111	CompTIA A+ (Core 1 Hardware/desktops and mobile devices)	3.5
CIS 105	Introduction to Computers and Applications	3
MAT 120	Survey of Mathematics	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**12.5**
	SECOND SEMESTER	
NET 110	CompTIA Net+ (Network Essentials)	3.5
NET 121	CompTIA A+ (Core 2 Software/user support)	3.5
NET 210	CompTIA Linux+ (Installation and administration)	3.5
ENG 107	Writing in the Workplace	3
	SEMESTER TOTAL	**13.5**
	SUMMER 1	
NET 161	Scripting for Security	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**6**
	THIRD SEMESTER	
NET 151	Microsoft Modern Desktop (Exam MD-101)	3.5
NET 171	Microsoft Azure Administrator	3.5
NET 240	Cisco CCNA 200-301 part 1 (Implementing Cisco Technologies)	3.5
CFS 155	CompTIA Security+(Cybersecurity Essentials)	3.5
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
NET 241	Cisco CCNA 200-301 part 2 (Administering Cisco Technology)	3.5
NET 265	Capstone for IT Professionals	1
CFS 206	Ethical Hacker	3.5
Elective	Science	3-4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**14-15**
	TOTAL CREDITS	**60**

CSW - Computer Specialist - Web Design and Development A.A.S.

Overview

Program Full Description

Prepares students for occupations such as a Web Designer and Developer in the information technology industry. Graduates will be prepared to participate in the development and support of enterprise-level electronic commerce websites using methodologies focused on the development of those sites without the use of prepackaged software. Students will apply current versions of HTML, XHTML, CSS, JavaScript, Adobe Flash, and PHP with MySQL in the development of websites. Real-world projects are integrated throughout the program and effective project management techniques are used. Adobe Dreamweaver is presented as a tool to aid in the creation of websites.

Advisor Notes

Program-specific electives a student must choose from *Mathematics electives may include all courses from MAT 105 or higher with the exception of MAT 121

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ART 107	Digital Design	3
CIS 105	Introduction to Computers and Applications	3
CIS 112	Computational Thinking and Programming Logic	3
CIS 180	Introduction to Project Management	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
CIS 133	User Experience Design	3
CIS 141	Client-Side Scripting I	3.5
CIS 145	Systems Analysis and Design	3
CMN 120	Small Group Communication	3
Elective*	Mathematics	3-4
	SEMESTER TOTAL	**15.5**
	THIRD SEMESTER	
ART 128	Computer-Aided Logo and Advertising Design	3
CIS 111	Electronic Commerce	3
CIS 116	Adobe Dreamweaver	1
CIS 142	Client-Side Scripting II	2
CIS 255	The Database Environment	3.5
PSY 140	Introduction to Psychology	3
Or SOC 150	Introduction to Sociology	
	SEMESTER TOTAL	**15.5**
	FOURTH SEMESTER	
ART 248	Web-Based Interactive Animation	3
CIS 207	Unix Server-Side Scripting	3
ENG 107	Writing in the Workplace	3
Elective*	Mathematics	3-4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**61**

DAPA - Music/Sound Production A.A.

Overview

Program Full Description

This program is designed for students interested in the music and sound production industries. Program course work explores career opportunities in these industries. Industry positions include, but are not limited to, music producer, sound designer, sound editor, disc jockey, recording and live sound engineers. Students gain practical experience by utilizing industry-standard software, hardware and common production techniques. Students are urged to consult with an academic advisor or counselor to ensure that the courses selected meet LCCC requirements and those of the four-year college or university to which transfer is intended.

Advisor Notes

Students should consult the catalog of the four-year college or university to which he or she plans to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer and University Center. For more information, contact an academic advisor or counselor. Recommended Math elective: MAT 105 Recommended Free electives: CMN 113, CMN 204, CMN 205, DMP 225 Recommended Lab Science: PHY 101 Recommended General Education electives: CIS 105, CMN 112, CMN 120, CMN 121

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CMN 101	Introduction to Media Communications	3
CMN 105	Interpersonal Communication	3
ENG 105	Research and Composition	3
Elective*	Mathematics	3
Elective+	Free Elective	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
DMP 115	Principles of Sound Production	3
CMN 118	Media Scriptwriting	3
ENG 106	Introduction to Literature	3
MUS 101	Introduction to Music	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
DMP 216	Digital Audio Production	3
MUS 110	Functional Music Theory	3
Elective+	Free Elective	3
Elective	Social Science/Humanities	3
Elective●	Laboratory Science	4
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
Elective	Communications Media Practicum Communication, ART elective	3
Electives□	General Education	6
Elective+	Free Elective	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**61**

DRF - Drafting and Design A.A.S.

Overview

Program Full Description

This program is designed to prepare students for employment as an industry technician or draftsman who is able to make detail and design drawings. The program provides students with knowledge and experience in the areas of computer-aided drafting (CAD), robotics, and computer-aided manufacturing (CAM), so that they are prepared for the high-technology methods employed by industry. Graduates assist engineers and designers in the investigation, experimentation, and development of products, tools, mechanisms, and machines. Graduates also prepare appropriate detail and design drawings for use in production. Jobs for which graduates are expected to be qualified include detail draftsperson, design draftsperson, product design, machine design, and tool design.

Completion Requirements

Simple Requisites

Requirements

Drafting and Design Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- BGT103 - Fluid Power
- BGT240 - Industrial Automation
- MET101 - Mechanical Print Reading
- MET104 - Manufacturing
- MET105 - Machine Shop (Inactive)
- MET106 - Mechanical Drafting
- MET111 - Computer Aided Drafting
- MET115 - Computer-Aided Manufacturing
- MTD201 - Basic Mechanisms
- MTD206 - Machine Design
- MTD208 - Tool Design

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
  OR ENG107 - Writing in the Workplace
- MAT130 - Industrial Mathematics
- PHY201 - Introduction to Physics I

Electives

Complete ALL of the following Course Sets:

- Social Science Electives
  OR Humanities Electives
- Social Science Electives
  OR Humanities Electives
- Free Elective
- Free Elective

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

	FIRST SEMESTER	
ENG 105	Research and Composition	3
MET 101	Mechanical Print Reading	3
MET 104	Manufacturing	3
MAT 105	Intermediate Algebra	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
BGT 103	Fluid Power	3
ENG 106	Introduction to Literature	
or ENG 107	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
MAT 130	Industrial Mathematics	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
MET 106	Mechanical Drafting	4
MTD 201	Basic Mechanisms	4
PHY 201	Introduction to Physics I	4
BGT 240	Industrial Automation	3
Elective	Free Elective	3
	SEMESTER TOTAL	**18**
	FOURTH SEMESTER	
MET 115	Computer-Aided Manufacturing	3
MTD 206	Machine Design	4
MTD 208	Tool Design	4
Elective	Free Elective	3
	SEMESTER TOTAL	**14**
	TOTAL CREDITS	**63**

DVPA - TV/Film A.A.

Overview

Program Full Description

This program is designed for students interested in the television, film, and a variety of video production industries. Program course work explores career opportunities in these visual communications industries through practical experience in state-of-the-art professional facilities and the teaching of fundamental concepts and theories behind the practice. Industry positions include, but are not limited to, director, producer, camera operator, video editor, script writer, light designer, and production

Advisor Notes

Mathematics Elective: MAT 105 General Education Electives: CIS 105, CMN 112, 120, 121, MUS 101, 110 Free Electives: ART 107, 109, 111, DMP 115

collaboration. Students utilize industry-standard software, hardware and production techniques as they build professional-quality portfolios of their work and engage in projects with their community. While some students may pursue the program of study for immediate entry into the workforce rather than transfer, the degree is designed for students preparing to enter a program leading to a baccalaureate degree at a four-year college or university.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CMN 101	Introduction to Media Communications	3
CMN 105	Interpersonal Communication	3
ENG 105	Research and Composition	3
Elective	Mathematics	3-4
Elective	Free Elective	3
	SEMESTER TOTAL	**15-16**
	SECOND SEMESTER	
ART 119	Introduction to digital Photography	3
CMN 113	TV Studio Production	3
CMN 118	Media Scriptwriting	3
ENG 106	Introduction to Literature	3
Elective	Social Science/ Humanities	4
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
CMN 204	Video Field Production	3
CMN 205	Introduction to Video Editing	3
Elective	General Education	3
Elective	Social Science/ Humanities	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
Elective	DMP 250 Communications Media Practicum, Communication, ART elective	3
Electives	General Education	6
Elective	Free Elective	3
Elective	Social Science/ Humanities	3
	SEMESTER TOTAL	**18**
	TOTAL CREDITS	**61**

ECDD - Early Childhood Education Director Specialized Credit Diploma

Overview

Program Full Description

This program is intended for students who already hold a credential in Teacher Education and are currently employed and/or plan to move into a director or assistant director position. The primary purpose of this program is to enhance knowledge and skills for early childhood directors/administrators. This specialized credit diploma program meets the requirements of the PA Pathways Director Core Certificate program and contributes to students eligibility to apply for the PA Directors Credential.

Advisor Notes

For students entering this program, they will earn the 9 post-graduate credits required for eligibility for the PA Directors Credential, however they will also need to meet a number of other eligibility requirements on their own through previously demonstrated credit-bearing work in ECE, supervisory work at their place of employment, and professional contributions. It is important to note that students enrolling in this program may have an Associate's Degree or higher in Early Childhood Education or Education but also may have a degree in a related human service field. Therefore, they should be aware that to be eligible to apply for their credential after the completion of this program, they must have 18 total credits in ECE on their transcripts. If they are unable to meet that 18 credit minimum, they will need to complete additional elective coursework to satisfy the credentialing requirements. Full details on candidate eligibility can be found at https://www.pakeys.org/get-professional-development/credentials-degrees/director-credential/

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ECE 225	The Early Childhood Professional	3
or EDU 210	Behavior Management and Guidance Practices	
ECE 230	The Director With Vision	3
ECE 235	Program Organization and Management	3
	TOTAL CREDITS	**9**

ECE - Early Childhood Education A.A.S.

Overview

Program Full Description

This program prepares the graduate to work with children aged birth through nine. Students who complete the AAS in Early Childhood Education are qualified as a group supervisor or head teacher in an early care and education program, including Head Start classrooms and childcare centers with children in infant/toddler, preschool or school-age care. With additional experience, graduates can be qualified to be Center Directors. Students who transfer to four-year colleges work towards Pre-K to fourth grade teacher certification for employment in early childhood or elementary school settings.Students seeking to transfer and interested in seeking teaching certification must consult with an advisor or counselor to select electives in careful accordance with the general education and/or pre-professional requirements of the four-year college or university to which students intend to transfer. Student seeking transfer are highly recommended to: Identify transfer institution early and carefully follow advisor, college catalog, college web page along with transfer agreement. Maintain a GPA of 3.0 or higher. Successfully complete six credits in math and immediately take PAPA exam. Maintain a credential portfolio.

Advisor Notes

Up to 15 ECE credits can be transferred from an accredited college. It is highly preferred that ECE credits transfer from a NAEYC Accredited ECE program of study

Students intending to transfer need to choose courses based on the college transfer agreement.

All ECE courses have in-person lab/fieldwork component. Hours vary by course. See individual course descriptions in credit catalog.

Recommended Science Electives: BIO 101, 105, CHE 105, PHY 101.

Completion Requirements

Simple Requisites

Requirements

Early Childhood Education Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- ECE110 - Fund of Early Child Educ
- ECE120 - Child Growth & Development.
  OR ECE125 - Educ & Care of Infants & Todd
- ECE130 - Integ Arts/Play in Early Child
- ECE140 - Observation & Recording Tech
- ECE210 - Integ Curr in Early Child
- ECE215 - Language and Literacy
- ECE218 - Communities and Families
- ECE221 - Advanced Fieldwork Experience
- ECE225 - Early Childhood Professional
- EDU105 - Intro to Special Education
- EDU114 - Careers in Education
- MAT125 - Fund of Math I
- MAT126 - Fund of Mathematics II

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature

Electives

Complete ALL of the following Course Sets:

- General Education Electives
- General Education Electives
- History or Geography
- Humanities Electives
- Lab Sciences
- Political Science, Psychology, or Sociology

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
EDU 114	Careers in Education	1
ECE 110	Fundamentals of Early Childhood Education	3
ECE 120	Children's Growth and Development	3
or ECE 125	Education and Care of Infants and Toddlers	
ENG 105	Research and Composition	3
MAT 125	Fundamentals of Mathematics I	3
Elective	Political Science, Psychology, or Sociology	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
ECE 130	Integrating the Arts and Play in Early Childhood	3
ECE 140	Observation and Recording Techniques	3
EDU 105	Introduction to Special Education	3
ENG 106	Introduction to Literature	3
MAT 126	Fundamentals of Mathematics II	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
ECE 210	Integrating Curriculum in Early Childhood	3
ECE 215	Language and Literacy	3
Elective	History or Geography	3
Elective	Lab Science	4
Elective	General Education	3
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
ECE 218	Communities and Family	3
ECE 221	Advanced Fieldwork in Early Childhood Education	3
ECE 225	The Early Childhood Professional	3
Elective	Humanities	3
Elective	General Education	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**62**

ECT - Electrical and Computer Engineering Technology A.A.S.

Overview

Program Full Description

This program is designed to prepare students for technical positions in the electrical and electronics, computer control systems, industrial automation, and manufacturing industries. Students will develop the skills to analyze, design and implement electrical and computer systems. Graduates are expected to be qualified for jobs such as electrical and computer engineering technician, electronics technician, software engineering technician, systems and hardware development technician, assistant system designer and installer, industrial maintenance technician, quality control technician, technical writer, and sales representative.

Advisor Notes

Required Electives Program-specific electives a student must choose from General Education electives a student must choose from Recommended Electives Program-specific electives a student may choose from General Education electives a student may choose from Program Notes *ENG 107 may be substituted with ENG 106 + MAT 165 or higher-level mathematics courses will also satisfy the mathematics requirement Admission Requirements

Completion Requirements

Simple Requisites

Requirements

Electrical and Computer Engineering Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- BGT110 - Fundamentals of Technology
- CIS105 - Introduction to Computers and Applications
- CIS134 - Object-Oriented Programming with Python
- CIS225 - Computer Organization & Arch
- ELE120 - D.C. Circuits
- ELE130 - Digital Fundamentals
- ELE165 - A.C. Circuits
- ELE175 - Intro to Microprocessors
- ELE210 - Electronic Circuits
- ELE215 - Industrial Electronics
- ELE235 - Programmable Controllers
- ELE255 - Telecommunications
- NET110 - CompTIA Network Essentials

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG107 - Writing in the Workplace
  OR ENG106 - Introduction to Literature
- MAT130 - Industrial Mathematics
- PHY201 - Introduction to Physics I

MAT 165 or higher-level mathematics courses will also satisfy the mathematics requirement

Electives

Earn at least 6 credits from the following:

- Social Science Electives
  OR Humanities Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence
FIRST SEMESTER:

- BGT 110 Fundamentals of Technology (3 credits)
- CIS 105 Introduction to Computers (3 credits)
- ELE 120 DC Circuits (4 credits)
- ELE 130 Digital Fundamentals (4 credits)
- ENG 105 Research and Composition (3 credits)

SECOND SEMESTER:

- CIS 134 Object-Oriented Programming with Python (3 credits)
- ELE 165 AC Circuits (4 credits)
- ELE 175 Introduction to Microprocessors (4 credits)
- MAT 130 Industrial Mathematics (3 credits)
- Elective Social Science / Humanities (3 credits)

THIRD SEMESTER:

- CIS 225 Computer Organization and Architecture (3 credits)
- ELE 210 Electronic Circuits (4 credits)
- ELE 215 Industrial Electronics (2 credits)
- ELE 235 Programmable Logic Controllers (2 credits)
- ENG 107 Writing in the Workplace (3 credits)

FOURTH SEMESTER:

- ELE 255 Telecommunications (3 credits)
- NET 110 CompTIA Network+ (Network Essentials) (3.5 credits)
- PHY 201 Introduction to Physics I (4 credits)
- Elective Social Science / Humanities (3 credits)

EDSA - Special Education A.A.

Overview

Program Full Description
Pre-professional program provides a foundation for continued study toward a bachelor's degree in Special Education. Students pursuing a degree in Early Childhood Education, Elementary Education, or Secondary Education are provided with the fundamental knowledge of individuals with special needs. A wide range of electives permits students to select course Pre-professional program provides a foundation for continued study toward a bachelor's degree in Special Education. Students pursuing a degree in Early Childhood Education, Elementary Education, or Secondary Education are provided with the fundamental knowledge of individuals with special needs. A wide range of electives permits students to select courses that will fulfill requirements of four-year colleges or universities to which they wish to transfer. It is essential that students consult with a counselor or faculty advisor when planning their academic programs. Field experiences and observations are incorporated into the program. s that will fulfill
Advisor Notes
A student interested in teacher certification should consult with an advisor to select electives in accordance with the general education requirements of the baccalaureate program intended for transfer.

Completion Requirements

Simple Requisites

Requirements

Special Education Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- EDU101 - Foundations of Education
- EDU114 - Careers in Education
- EDU105 - Intro to Special Education
- PSY240 - Educational Psychology

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- ENG111 - Speech
- PSY140 - Introduction to Psychology

Special Education Electives

Complete at least 2 of the following courses:

- EDU210 - Behavior Mgmt & Guide
- SED200 - Strat for Children w/Excep
- SED205 - Assist Tech for Child/Except

Electives

Complete ALL of the following Course Sets:

- Free Elective
- General Education Electives
- Humanities Electives
- Lab Sciences
- Mathematics Elective
- Mathematics Elective
- Social Science Electives
- Social Science Electives
  OR Humanities Electives
- Physical Education

Mathematics Recommended Electives: MAT 125 and 126 for elementary level teaching

Social Science Recommended Electives: PSY 145 or 242

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
EDU 114	Careers in Education	1
EDU 101	Foundations of Education	3
ENG 105	Research and Composition	3
Elective	Humanities	3
PSY 101	Introduction to Psychology	3
Elective	Mathematics	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
EDU 105	Introduction to Special Education	3
Elective	Special Education	3
ENG 106	Introduction to Literature	3
Elective	Mathematics	3
PSY 240	Educational Psychology	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
Elective	Special Education	3
ENG 111	Speech	3
Elective	Social Sciences / Humanities	3
Elective	Laboratory Science	4
Elective	Physical Education	1
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
Elective	Social Science	3
Elective	General Education	3
Electives	Free Electives	9
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**60**

EDUA - Education A.A.

Overview

Program Full Description

This program provides a foundation for study towards a four-year degree in education and is intended for preparation to teach grades 4 and above. The wide range of electives permits students to select courses that will fulfill requirements of four-year colleges. Students who transfer work towards teacher certification for employment in middle or secondary school settings.

Advisor Notes

Required Electives

Program-specific electives a student must choose from

General Education electives a student must choose from

Recommended Electives
Education and/or Free Electives: EDU 101, 120, 125, 202, 240, 291; SED 200, 205. However, students must take the responsibility to tailor their course selection based on their intended transfer college's requirements.
Mathematics Electives: MAT 125, 126
Social Science Electives: PSY 140, 145; SOC 150, 251; GEO 110, 115.

Completion Requirements

Simple Requisites

Requirements

Education Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- EDU101 - Foundations of Education
- EDU105 - Intro to Special Education
- EDU114 - Careers in Education
- EDU115 - Education Field Experience I

EDU 101 may be substituted by another Education Course

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature

Electives

Complete ALL of the following Course Sets:

- Education Electives
- Free Elective
- Free Elective
- Humanities Electives
- Lab Sciences
- Mathematics Elective
- Mathematics Elective
- Social Science Electives

Alternative Education Electives may be substituted if appropriate for transfer school program.

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
EDU 114	Careers in Education	1
EDU 101	Foundations of Education	3
Or Elective	Education Elective	
ENG 105	Research and Composition	3
Elective	Social Science	3
Elective	Mathematics	3
Elective	Humanities	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
EDU 105	Introduction to Special Education	3
EDU 115	Education Field Experience	1
ENG 106	Introduction to Literature	3
Elective	Mathematics	3
Elective	Lab Science	4
	SEMESTER TOTAL	**14**
	THIRD SEMESTER	
Elective	Education Elective	3
Electives	Free Electives	12
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
Elective	Social Science	3
Electives	Free Electives	12
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**60**

EET - Electrical Engineering Technology A.A.S.

Overview

Program Full Description

This program prepares students to transfer to colleges or universities that offer a bachelors degree in electrical/electronic technology or to obtain entry-level employment in the electrical or electronics industries. Graduates are expected to be qualified for such jobs as technical investigator, electronics technician, quality control technician, engineering aide, and customer engineer.

Advisor Notes

Students planning to transfer to a four-year college or university should substitute PHY 210/215 for PHY 201/202 and ENG 106 for ENG 107. Some four-year colleges and universities require that ENG 111 be completed prior to transfer with junior-year standing.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
ELE 130	Digital Fundamentals	4
ENG 105	Research and Composition	3
MAT 191	Calculus and Analytic Geometry I	4
	SEMESTER TOTAL	**18**
	SECOND SEMESTER	
ELE 165	AC Circuits	4
ELE 175	Introduction to Microprocessors	4
MAT 196	Calculus and Analytic Geometry II	4
PHY 201*	Introduction to Physics I	4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**19**
	THIRD SEMESTER	
EGR 213	Statics	3
ELE 210	Electronic Circuits	4
ELE 215	Industrial Electronics	2
ELE 235	Programmable Controllers	2
PHY 202*	Introduction to Physics II	4
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
ELE 275	Integrated Circuits	4
ELE 255	Telecommunications	3
BGT 240	Industrial Automation	3
ENG 107*	Writing in the Workplace	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**16**
	TOTAL CREDITS	**68**

EGRS - Engineering A.S.

Overview

Program Full Description

This pre-professional program has its foundation in mathematics and the physical and natural sciences. Upon completion of the program, the student has the option of pursuing a bachelor's degree in aeronautical, chemical, civil, electrical, industrial, mechanical, or nuclear engineering at a four-year college or university.

Advisor Notes
Transfer information for this program is on file in the Transfer Center. For more information, contact an **academic advisor or counselor.**

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CHE 111	General Chemistry 1	4
EGR 102	Engineering Orientation	1
ENG 105	Research and Composition	3
MAT 191	Calculus and Analytic Geometry 1	4
Elective	Humanities	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
CHE 112	General Chemistry 2	4
EGR 101	Engineering Graphics	4
MAT 196	Calculus and Analytic Geometry 2	4
PHY 210	General Physics 1	4
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
EGR 213	Statics	3
MAT 201	Calculus and Analytic Geometry 3	4
PHY 215	General Physics 2	4
Elective	Social Science	3
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
CIS 155	Introduction to Computer Science-Structured Programming C++	3.5
EGR 214	Dynamics	3
ENG 106	Introduction to Literature	3
Elective	General Education	3-4
Elective	Social Science / Humanities	3
	SEMESTER TOTAL	**15.5-16.5**
	TOTAL CREDITS	**60.5-61.5**

ELE - Electronics Technology A.A.S.

Overview

Program Full Description
This program is designed to prepare the student for employment as an electronics technician. Graduates will assist engineers in the design, construction, testing, and repair of electronic systems. Jobs for which graduates are expected to be qualified include technical investigator, electronics technician, computer service technician, quality control, electronic equipment installer, technical writer, engineering assistant in products development, navigational equipment technician, and sales representative.

Advisor Notes
Required Electives ♦Program Electives may be selected from any ASA, CIS, CON, ELE, HAC, KBD, MET or NET courses. *MAT 165 or higher level courses will also satisfy the mathematics requirement. +ENG 106 may be substituted.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
ELE 130	Digital Fundamentals	4
ENG 105	Research and Composition	3
MAT 130*	Industrial Mathematics	3
	SEMESTER TOTAL	**17**
	SECOND SEMESTER	
ELE 165	AC Circuits	4
ELE 175	Introduction to Microprocessor	4
ENG 107+	Writing in the Workplace	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**14**
	THIRD SEMESTER	
ELE 210	Electronic Circuits	4
ELE 215	Industrial Electronics	2
ELE 235	Programmable Controllers	2
PHY 201	Introduction to Physics I	4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
ELE 255	Telecommunications	3
BGT 240	Industrial Automation	3
ELE 275	Integrated Circuits	4
PHY 202	Introduction to Physics II	4
Elective♦	Program Elective	3
	SEMESTER TOTAL	**17**
	TOTAL CREDITS	**63**

ELEC - Electronics Certificate

Overview

Program Full Description

Graduates may be employed as electronics technicians. The program at right is recommended; however, other courses may be substituted with the approval of the electronics faculty.

Advisor Notes

MAT 160 or higher level course will also satisfy the mathematics requirement.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
	SEMESTER TOTAL	**7**
	SECOND SEMESTER	
ELE 130	Digital Fundamentals	4
MAT 130*	Industrial Mathematics	3
	SEMESTER TOTAL	**7**
	THIRD SEMESTER	
ELE 165	AC Circuits	4
ELE 175	Introduction to Microprocessors	4
ELE 235	Programmable Controllers	2
	SEMESTER TOTAL	**10**
	FOURTH SEMESTER	
ELE 210	Electronic Circuits	4
ELE 275	Integrated Circuits	4
	SEMESTER TOTAL	**8**
	TOTAL CREDITS	**32**

ELT - Electrical Technology A.A.S.

Overview

Program Full Description

This program is designed to prepare the student for employment as an electrical/electronic technician. The program provides students with knowledge and experiences in the areas of electrical wiring, blueprint reading, analog and digital electronics, programmable controllers, and industrial control systems. Jobs for which graduates are expected to be qualified include electrical/electronic technician, field engineer, industrial maintenance technician, industrial equipment installer, and technical sales representative.

Advisor Notes

MAT 160 or higher level course will also satisfy the mathematics requirement. ENG 106 may be substituted for ENG 107.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
ELE 130	Digital Fundamentals	4
MAT 130*	Industrial Mathematics	3
HAC 119	Construction Print Reading	3
	SEMESTER TOTAL	**17**
	SECOND SEMESTER	
ELE 165	AC Circuits	4
ELE 175	Introduction to Microprocessors	4
ENG 105	Research and Composition	3
HAC 140	Electrical Maintenance I	3
Elective	General Education	3
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
ELE 210	Electronic Circuits	4
ELE 215	Industrial Electronics	2
ELE 235	Programmable Controllers	2
HAC 155	Electrical Maintenance II	3
HAC 160	Residential Wiring	3
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
ENG 107+	Writing in the Workplace	3
HAC 250	Commercial and Industrial Wiring	3
PHY 201	Introduction to Physics I	4
Electives	Social Science/Humanities	6
	SEMESTER TOTAL	**16**
	TOTAL CREDITS	**64**

ELTC - Electrical Technology Certificate

Overview

Program Full Description

This program is designed to prepare the student for entry-level employment as an electrical/electronic maintenance technician. Students are provided with knowledge and experiences in the areas of electrical wiring, blueprint reading, basic and industrial electronics, programmable controllers, and industrial control systems. The program provides individuals with an opportunity to update their technical knowledge and skills with training and experiences using state-of-the-art high-technology equipment. All courses in the program may be applied to the Associate in Applied Science degree in Electrical Technology.

Advisor Notes
MAT 160 or higher level course will also satisfy the mathematics requirement.

Course Sequence

Course Sequence

ourse Code	Course Title	Credits
	FIRST SEMESTER	
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
HAC 140	Electrical Maintenance I	3
	SEMESTER TOTAL	**10**
	SECOND SEMESTER	
ELE 130	Digital Fundamentals	4
MAT 130*	Industrial Mathematics	3
	SEMESTER TOTAL	**7**
	THIRD SEMESTER	
ELE 165	AC Circuits	4
ELE 235	Programmable Controllers	2
HAC 119	Blueprint Reading	3
	SEMESTER TOTAL	**9**
	FOURTH SEMESTER	
HAC 155	Electrical Maintenance II	3
ELE 210	Electronic Circuits	4
HAC 160	Residential Wiring	3
	SEMESTER TOTAL	**10**
	TOTAL CREDITS	**36**

ENBD - Entrepreneurship and Small Business Specialized Credit Diploma

Overview

Program Full Description
This program allows students to explore the world of free enterprise. Entrepreneurs are risk takes; self-motivated individuals who can predict paradigm shifts giving way to new business opportunities. The student will evaluate the business skills and commitment necessary to successfully operate an entrepreneurial venture.

Advisor Notes
Required Electives Challenges and rewards of entrepreneurship. The student will understand the role entrepreneurial business in the United States and the impact on our national and global economy.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ACC 160	Principles of Accounting I	3
BUS 248	Essentials of Entrepreneurship and Small Business	3
Elective	BUS 141 or BUS 152 or BUS 221 or BUS 252 or CMN 110	3
Elective	Free Elective	3
	SEMESTER TOTAL	**12**
	SECOND SEMESTER	
BUS 209	Business Communications	3
BUS 241	Business Law I	3
IDS 105	Thinking, Problem Solving and Team Building	3
	SEMESTER TOTAL	**9**
	TOTAL CREDITS	**21**

ENVS - Environmental Science A.S.

Overview

Program Full Description

The environmental science program will provide graduates with an integrative study of natural systems and the effects of selective pressures, both natural and manmade, that continue to shape these systems. Students that complete this program will be prepared to either enter a four-year program leading to a baccalaureate degree or enter the workforce as an entry-level environmental scientist.

Advisor Notes

Gateway Courses: Based on placement testing in reading, writing and math, these prerequisite courses may have to be taken before placement in College English or Mathematics beginning the first semester and concurrently. RSS 099 Basic Skills Reading 3 RSS 100 Critical Reading 3 ENG 099 Basic Skills Writing 3 ENG 100 Fundamentals of Writing 3 MAT 090 Mathematical Literacy 6 ESL 251 English for Academic Purpose 6 (Required for ESL students only.) Please note, taking gateway courses will increase your time for completion. Required Electives Program-specific electives a student must choose from General Education electives a student must choose from Recommended Electives Program-specific electives a student may choose from General Education electives a student may choose from

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BIO 110	General Biology I	4
CHE 111	General Chemistry I	4
ENG 105	Research and Composition	3
ENG 111	Speech	3
MAT 160	College Algebra	3
	SEMESTER TOTAL	**17**
	SECOND SEMESTER	
BIO 111	General Biology II	4
CHE 112	General Chemistry II	4
ENG 106	Introduction to Literature	3
MAT 165	College Trigonometry	3
Elective	Social Science	3
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
CHE 205	Organic Chemistry I	4
BIO 137	Introduction to Environmental Science	4
PHY 201	Physics I	4
Elective	Humanities	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
BIO 116	Topics in Ecology	3
MAT 150	Introduction to Probability and Statistics	3
Elective	Course numbered 101 or higher	3-4
Elective	Social Science/Humanities	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**16-17**
	TOTAL CREDITS	**65**

EXSS - Exercise Science A.S.

Overview

Program Full Description

This program prepares students to transfer to a baccalaureate degree program in Exercise Science, Adult Health, Exercise Physiology, Kinesiology, and similar curricula in Health, Physical Education, Recreation and Dance. Graduates of such baccalaureate programs find employment in health, wellness, health management, health center and fitness center program management, corporate health and wellness programs, health and physical education teaching, exercise physiology teaching and research, medical exercise rehabilitation programs, adult fitness programs and related fields. The curriculum includes general education requirements, a basic science and math foundation

and a broad base in discipline-related courses such as exercise physiology, nutrition, and exercise measurement and prescription. In addition, the program will prepare the students to sit for nationally accredited exams in the field of exercise science such as the American College of Sports Medicine (ACSM) and the National Strength and Conditioning Association (NSCA).

Advisor Notes

Students should consult the catalog of the four-year college or university to which they plan to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer and University Center. For more information, contact an academic advisor or counselor.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
EXS 101	Introduction to Exercise Science	3
HPE 101	Personal and Community Health	2
MAT 150	Introduction to Probability and Statistics	
or MAT 160	College Algebra	3
Elective	Physical Education	1
Elective	Humanities	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
ENG 106	Introduction to Literature	3
EXS 102	Exercise Measurement & Prescription	3
BIO 163	Anatomy and Physiology I	4
SPM 102	Sport History and Philosophy	3
Elective	Social Science	3
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
EXS 107	Care and Prevention of Athletic Injuries	3
EXS 108	Sport Nutrition	3
BIO 164	Anatomy and Physiology II	4
Elective	Physical Education	1
Elective	Social Sciences/Humanities	3
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
ENG 111	Speech	3
EXS 103	Methods of Instruction and Personal Training	3
SPM 103	Science and Wellness	3
BIO 124	Nutrition	3
Elective	Free Elective	3-5
	SEMESTER TOTAL	**15-17**
	TOTAL CREDITS	**60**

GRDA - Graphic Design A.A.

Overview

Program Full Description

This program is designed for those students who have a special interest in entering the world of graphic design. The program prepares students with a foundation in fine arts, as well as thorough instruction of the tools and techniques needed for digital art and website creation. As in the Fine Arts program, the Graphic Design curriculum consists of a partnership between LCCC and The Baum School of Art, Allentown. While some students may pursue the program of study for personal enrichment or employment rather than transfer, the degree is designed for students preparing to enter a program leading to a baccalaureate degree at a four-year college or university. Because the requirements of four-year colleges or universities vary greatly, students should choose an intended transfer college as soon as possible and work with their advisor to coordinate course selection with the intended transfer institutions program. All students will be expected to prepare a portfolio for transfer or employment applications

Advisor Notes

Students should consult the catalog of the four-year college or university to which he or she plans to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer and University Center. For more information, contact an academic advisor or counselor. *Mathematics Elective must be MAT 105, MAT 120, MAT 150, or MAT numbered above 150.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ART101	Introduction of Art	3
ART 108	Two-Dimensional Design	3
ART 111	Color Theory	3
ENG 105	Research and Composition	3
ART 120	Photography I	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
ART 107	Digital Design	3
ART 110	Drawling I	3
CIS 141	Client-Side Scripting I	3.5
CIS 133	User Experience Design	3
ENG 106	Introduction to Literature	3
	SEMESTER TOTAL	**15.5**
	THIRD SEMESTER	
ART 128	Computer-Aided Logo and Advertising Design	3
ART 135	Three-Dimensional Design	3
or ART 132	Principles of 3D Modeling and Texturing	
ART 145	Art Illusion	3
CIS 116	Adobe Dreamweaver	1
PSY 140	Introduction of Psychology	3
Elective*	Mathematics*	3-4
	SEMESTER TOTAL	**16-17**
	FOURTH SEMESTER	
ART 242	Desktop Publishing	3
ART 248	Web-Based Interactive Animation	3
BUS 141	Principles of Advertising	3
SOC 155	Mass Culture	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**16**
	SUMMER SESSION	
	TOTAL CREDITS	**62.5**

GSAA - General Studies A.A.

Overview

Program Full Description

The General Studies degree prepares students for transfer to a four-year college or university. Students study a balanced program of humanities, mathematics, science, and social science courses as a foundation for further learning. Students are urged to consult with an academic advisor or counselor to ensure that the courses selected meet LCCC requirements and those of the four-year college or university to which transfer is intended.

Advisor Notes

Students should consult the catalog of the four-year college or university to which they plan to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer and University Center. For more information, contact an academic advisor or counselor.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
SDS 106	Liberal Arts First-Year Seminar	1
Elective	Physical Education	1
Elective	Social Sciences	3
Elective	Mathematics	3-4
Elective	General Education	3
	SEMESTER TOTAL	**14-15**
	SECOND SEMESTER	
ENG 106	Introduction to Literature	3
ENG 111 or CMN 112	Speech CMN 112: Oral Communication and Presentation	3
Elective	Humanities	3
Elective	Laboratory Science	4
Elective	General Education	3
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
Elective	Social Sciences / Humanities (201 or higher)	3
Elective	General Education (201 or higher)	3
Elective	General Education (201 or higher)	3
Elective	Free Elective (101 or higher)	3
Elective	Free Elective (101 or higher)	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
Electives	Math / Science / Social Sciences / Humanities	3-4
Electives	General Education (201 or higher)	3
Elective	General Education (201 or higher)	3
Electives	Free Elective (101 or higher)	3
Electives	Free Elective (101 or higher)	3
	SEMESTER TOTAL	**15-16**
	TOTAL CREDITS	**60**

HAC - Heating, Air Conditioning and Refrigeration Technology A.A.S.

Overview

Program Full Description

The HVACR Technology program offers hands-on experiences to complement the technical training in the areas of heating, air conditioning, and refrigeration, as well as piping skills, residential and commercial wiring, interpreting construction drawings, industrial maintenance, and motor control for residential, commercial, and light industrial settings. Typical operating sequences and troubleshooting are stressed. The program culminates with the entry-level certifications offered by the Air Conditioning and Refrigeration Institute (ARI) and the Environmental Protection Agency (EPA) certification for refrigerant handling. Employment opportunities include installation and service technician for all facets of HVACR equipment, HVACR counter and outside salespersons, industrial maintenance mechanics, factory service representatives, estimators, and system designers.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
HAC 104	Basic Electricity	3
HAC 119	Construction Print Reading	3
HAC 131	Air Conditioning and Refrigeration I	3
MAT 118	Business and Financial Mathematics	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
HAC 132	Air Conditioning and Refrigeration II	3
HAC 140	Electrical Maintenance I	3
HAC 150	Heating Systems	3
ENG 107	Writing in the Workplace	3
ENG 111	Speech	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
HAC 135	Domestic Oil Burners	3
HAC 145	Advanced Air Conditioning and Refrigeration	3
HAC 160	Residential Wiring	3
HAC 155	Electrical Maintenance II	3
PHY 101	Conceptual Physics	4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**19**
	FOURTH SEMESTER	
HAC 125	Piping and Hydronic Heating	3
HAC 203	Heat Pumps	3
HAC 204	Gas Furnaces	3
HAC 210	HVACR Practicum	2
HAC 250	Commercial and Industrial Wiring	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**17**
	TOTAL CREDITS	**66**

HACC - Heating, Air Conditioning and Refrigeration Technology Certificate

Overview

Program Full Description

Provides students with an in-depth study of heating, air conditioning, and refrigeration servicing, as well as plant maintenance of electrical and mechanical control systems. All courses in the certificate program can be applied to the HVACR A.A.S. degree program. Employment opportunities include installation and service technician for all facets of HVACR equipment, HVACR counter and outside salespersons, and factory service representatives.

Advisor Notes

There are two course sequences depending on course load for the student. Please see an advisor to discuss the best path for you.

Course Sequence

Course Sequence

2 –Year Sequence

Course Code	Course Title	Credits
	FALL SEMESTER	
HAC 104	Basic Electricity	3
HAC 119	Construction Print Reading	3
HAC 131	Air Conditioning and Refrigeration I	3
	SEMESTER TOTAL	**9**
	SPRING SEMESTER	
HAC 132	Air Conditioning and Refrigeration II	3
HAC 140	Electrical Maintenance I	3
HAC 150	Heating Systems	3
	SEMESTER TOTAL	**9**
	FALL SEMESTER	
HAC 135	Domestic Oil Burners	3
HAC 145	Advanced Air Conditioning and Refrigeration	3
HAC 160	Residential Wiring	3
	SEMESTER TOTAL	**9**
	SPRING SEMESTER	
HAC 125	Piping and Hydronic Heating	3
HAC 203	Heat Pumps	3
HAC 204	Gas Furnaces	3
	SEMESTER TOTAL	**9**
	TOTAL CREDITS	**36**

12- Month Sequence

Course Code	Course Title	Credits
	FALL SEMESTER	
HAC 104	Basic Electricity	3
HAC 119	Construction Print Reading	3
HAC 131	Air Conditioning and Refrigeration I	3
HAC 150	Heating Systems	3
	SEMESTER TOTAL	**12**
	SPRING SEMESTER	
HAC 132	Air Conditioning and Refrigeration II	3
HAC 140	Electrical Maintenance I	3
HAC 135	Domestic Oil Burners	3
HAC 204	Gas Furnaces	3
	SEMESTER TOTAL	**12**
	SUMMER SEMESTER	
HAC 145	Advanced Air Conditioning and Refrigeration	3
HAC 125	Piping and Hydronic Heating	3
HAC 160	Residential Wiring	3
HAC 203	Heat Pumps	3
	SEMESTER TOTAL	**12**
	TOTAL CREDITS	**36**

HCO - Health Care Office Coordinator A.A.S.

Overview

Program Full Description

This program provides the foundation for a healthcare office coordinator to be able to effectively organize and oversee medical office workflow and processes in any health care setting. It addresses the principles of planning and management, documentation, revenue cycle functions, and health laws as it relates to privacy and confidentiality, budgeting and data analysis. The student will also acquire the skills necessary for analytical and critical thinking as well as problem solving.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BIO 163	Anatomy and Physiology I	4
ENG 105	Research and Composition	3
CIS 105	Introduction to Computers and Applications	3
HIT 110	Introduction to Health Information Science	3
HIT 120	Medical Terminology	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
BIO 164	Anatomy and Physiology II	4
BUS 252	Human Resource Management	3
ENG 106	Introduction to Literature	
or ENG 107	Writing in the Workplace	3
HCO 101	Administrative Strategies for Health Care Professionals	3
HIT 140	Health Law	3
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
ACC 160	Principles of Accounting	3
HCO 102	Health Care Management Practices and Technology	3
HCO 103	Reimbursement for Health Care Services	3
HIT 255	CPT Coding and Other Classification Systems	3
Elective	Humanities	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
BUS 262	Recruiting, Training and Evaluating Employees	3
HCO 104	Revenue Cycle Management	3
HIT 130	Health Information in Alternate Settings	4
HIT 250	ICD 10 CM/PCS Coding Systems	3
Elective	Social Science	3
	SEMESTER TOTAL	**16**
	TOTAL CREDITS	**63**

HMN - Human Resource Management A.A.S.

Overview

Program Full Description

This program allows students to specialize in personnel and human resource topics. The skills and knowledge provided enhance the ability to effectively attain and maintain an organization's most valuable resource- people. Graduates will be qualified to obtain entry-level human resource management positions, such as benefits coordinator, personnel records supervisor, training and development coordinator, and recruitment specialist.

Advisor Notes

Students should take BUS 109 in the first semester. *Or ENG 106 for those who plan to transfer

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BUS 109	Business as a Major	1
BUS 120	Introduction to Business Organization	3
BUS 211	Principles of Management	3
CIS 105	Introduction to Computers and Applications	3
ENG 105	Research and Composition	3
Elective	Humanities	3
	SEMESTER TOTAL	
	SECOND SEMESTER	
ACC 160	Principles of Accounting I	3
BUS 241	Business Law I	3
BUS 252	Human Resources Management	3
ENG 107	Writing in the Workplace	3
IDS 105	Thinking, Problem Solving, and Team Building	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
BUS 257	HRIS/Payroll Administration	3
BUS 258	Labor Relations	3
ECO 201	Principles of Macroeconomics	3
ENG 111	Speech	3
Elective	Mathematics	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
BUS 254	Human Resources Law	3
BUS 259	Compensation and Benefits Management	3
BUS 262	Recruiting, Training, and Evaluating Employees	3
PSY 142	Industrial/Organizational Psychology	3
Elective	Science	3-4
	SEMESTER TOTAL	**15-16**
	TOTAL CREDITS	**61**

HMNC - Human Resource Management Certificate

Overview

Program Full Description

This program allows students to specialize in personnel and human resource topics. The skills and knowledge provided enhance the ability to effectively attain and maintain an organizations most valuable resource people. Graduates will be qualified to obtain entry-level human resource management positions, such as benefits coordinator, personnel records supervisor, training and development coordinator, and recruitment specialist. Credits may be applied toward the A.A.S. degree in Human Resource Management.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	SUMMER SEMESTER	
BUS 120	Introduction to Business Organization	3
CIS 105	Introduction to Computers and Applications	3
	SEMESTER TOTAL	**6**
	FIRST SEMESTER	
BUS 211	Principles of Management	3
BUS 241	Business Law I	3
BUS 252	Human Resource Management	3
ACC 160	Principles of Accounting I	3
	SEMESTER TOTAL	**12**
	SECOND SEMESTER	
BUS 254	Human Resources Law	3
BUS 259	Compensation and Benefits Management	3
BUS 262	Recruiting, Training, and Evaluating Employees	3
IDS 105	Thinking, Problem Solving, and Team Building	3
	SEMESTER TOTAL	**12**
	TOTAL CREDITS	**30**

HSCS - Health Science A.S.

Overview

Program Full Description

The Associate in Science Health Science degree is a comprehensive yet flexible transfer program designed to provide students with foundational courses in science and social science courses, as well as a variety of general education electives for transfer to four year colleges and universities. Examples of baccalaureate programs to which students may transfer include nursing, health science, nutrition, pharmaceutical marketing, health information management, public and community health, and health services administration.

Advisor Notes

Student interested in the nursing program should consult with an advisor to review the requirements and application process. Students should check with four-year college or university for the most appropriate transfer courses.

Completion Requirements

Simple Requisites

Requirements

Health Science AS Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- BIO163 - Anatomy & Physiology I
- BIO164 - Anatomy & Physiology II
- PSY140 - Introduction to Psychology
- PSY145 - Human Growth & Development
- SOC150 - Introduction to Sociology

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature

First Year Experience

Complete ANY of the following Courses:

- SDS105 - Health Science Careers
- SDS110 - Intro to Assoc. Degree Nursing
- SDS111 - Intro LPN to Assoc. Deg. Nurs.
- SDS112 - Intro to Practical Nursing

Electives

Complete ALL of the following Course Sets:

- General Education Electives
- General Education Electives
- General Education Electives
- Lab Sciences
- Lab Sciences
- Humanities Electives
- Humanities Electives
- Mathematics Elective
- Physical Education
- Science Electives
- Free Elective
- Free Elective

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BIO 163	Anatomy and Physiology I	4
PSY 140	Introduction to Psychology	3
SOC 150	Introduction to Sociology	3
ENG 105	Research and Composition	3
Elective	Mathematics	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
SDS 105	Exploration of Health Sciences Careers	1
or SDS 110	Introduction to Associate's Degree Nursing	
or SDS 111	Introduction to LPN to ADN	
or SDS 112	Introduction to Practical Nursing	
BIO 164	Anatomy and Physiology II	4
PSY 145	Human Growth and Development	3
ENG 106	Introduction to Literature	3
Elective	General Education	3
	SEMESTER TOTAL	**14**
	THIRD SEMESTER	
Elective	Laboratory Science	4
Elective	Humanities	3
Elective	Humanities	3
Elective **	Free Elective	3
Elective	General Education	3
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
Elective	Laboratory Science	4
Elective	Science	3-4
Elective	General Education	3
Elective	PED	1
Elective**	Free Elective	3
	SEMESTER TOTAL	**14-15**
	TOTAL CREDITS	**60**

HUSC - Human Services Certificate

Overview

Program Full Description

This program is designed to prepare graduates with the values, knowledge, and skills required for entry-level employment as a human service generalist in the human service field. Human service workers assist individuals, families, and groups to improve the overall quality of life in the community. Graduates may be employed as providers of both direct and indirect client services, e.g. therapeutic support services, caregiver, living assistant/coach, crisis intervener, empowerer, administrative work, community outreach, and advocate. Graduates are employed as human service workers in a variety of settings, including, clinics, hospitals, group homes, correctional centers, government agencies, day treatment centers, sheltered workshops, extended care facilities, community based living homes, and social service agencies throughout the community.

Advisor Notes

Program Elective: HUS 115, 150, 210, 240

Course Sequence

Course Sequence

	FIRST SEMESTER	
HUS 110	Introduction to Human Services	3
HUS 120	Communication and Interviewing	3
SOC 150	Introduction to Sociology	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**12**
	SECOND SEMESTER	
HUS 160	Introduction to Counseling Skills and Theories	3
HUS 170	Systems and Process	3
SOC 251	The Family	3
	SEMESTER TOTAL	**9**
	THIRD SEMESTER	
HUS 180	Human Behavior and the Social Environment	3
Elective	Human Services Elective	6
	SEMESTER TOTAL	**9**
	TOTAL CREDITS	**30**

INR - Industrial Automation A.A.S.

Overview

Program Full Description

This program is designed to prepare a student for employment as a technician in an industrial environment that uses automated assembly or processing equipment. The program provides students with knowledge and experiences in the areas of analog and digital electronics, fluid power, robotics, computer-aided drafting (CAD), and computer-aided manufacturing (CAM), so that they are prepared for the high-technology methods employed by industry. Graduates will assist engineers in the design, construction, testing, and repair of industrial automation equipment.

Advisor Notes

*MAT 160 or higher level course will also satisfy the mathematics requirement. +ENG 106 may be substituted for ENG 107.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
ELE 130	Digital Fundamentals	4
MET 104	Manufacturing	3
	SEMESTER TOTAL	**14**
	SECOND SEMESTER	
BGT 103	Fluid Power	3
ELE 165	AC Circuits	4
ELE 175	Introduction to Microprocessors	4
ENG 105	Research and Composition	3
MAT 130*	Industrial Mathematics	3
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
BGT 240	Industrial Automation	3
ELE 210	Electronic Circuits	4
ELE 215	Industrial Electronics	2
ELE 235	Programmable Controllers	2
MTD 200	Introduction to Mechanisms	3
PHY 201	Introduction to Physics I	4
	SEMESTER TOTAL	**18**
	FOURTH SEMESTER	
ENG 107+	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
MET 115	Computer-Aided Manufacturing	3
Electives	Social Science/Humanities	6
Elective	General Education	3
	SEMESTER TOTAL	**19**
	TOTAL CREDITS	**68**

INRC - Industrial Automation Certificate

Overview

Program Full Description

The program is designed to prepare the student for employment as a technician in an industrial environment that uses automated assembly or processing equipment. Students are provided with knowledge and experiences in the areas of analog and digital electronics, fluid power, and robotics. The program also provides individuals currently employed as maintenance personnel an opportunity to update their technical knowledge and skills with training and experiences using state-of-the-art high-technology equipment. All courses in the program may be applied to the Associate in Applied Science degree in Industrial Automation.

Advisor Notes

*MAT 160 or higher level course will also satisfy the mathematics requirement.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
	SEMESTER TOTAL	**7**
	SECOND SEMESTER	
BGT 103	Fluid Power	3
ELE 130	Digital Fundamental	4
MAT 130*	Industrial Mathematics	3
	SEMESTER TOTAL	**10**
	THIRD SEMESTER	
BGT 240	Industrial Automation	3
ELE 235	Programming Controllers	2
MET 104	Manufacturing	3
	SEMESTER TOTAL	**8**
	FOURTH SEMESTER	
ELE 165	AC Circuits	4
ELE 175	Introduction to Microprocessors	4
MET 115	Computer Aided Manufacturing	3
	SEMESTER TOTAL	**11**
	TOTAL CREDITS	**36**

KBD - Kitchen and Bath Design A.A.S.

Overview

Program Full Description

This program is designed to prepare students for employment as kitchen and bath designers in the creative world of kitchen and bathroom design. Specialty topics covered will include interior design, color and textures, lighting principles, spatial planning, and computer-aided drafting (CAD), which will greatly enhance the students' learning experience. Graduates of this program would work in kitchen and bath design showrooms and would be involved in working with clients, creating room layouts, preparing accurate cost estimates, and overseeing the installation process. This program utilizes training materials supplied and supported by the National Kitchen and Bath Association (NKBA) and follows the NKBA guidelines in all design coursework. The working graduate would work towards becoming a Certified Kitchen Designer (CKD) or a Certified Bath Designer (CBD).

Course Sequence

Course Sequence

	FIRST SEMESTER	
KBD 101	Introduction to Interior Design	3
KBD 104	Kitchen/Bath Design Principles	3
MET 104	Manufacturing Materials	3
ENG 105	Research and Composition	3
MAT 118*	Business and Financial Mathematics	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
MET 111	Computer-Aided Drafting	4
ART 111	Color Theory	3
BUS 152	Principles of Sales	3
ENG 107	Writing in the Workplace	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
KBD 201	Kitchen/Bath Graphic Design	4
KBD 103	Interior Finishing	4
ENG 111	Speech	3
ART 110	Drawing I	
or ART 115	Painting I	3
KBD 105	Kitchen/Bath CAD Design	2
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
KBD 202	Kitchen/Bath Estimating	2
KBD 203	Kitchen/Bath Studio	4
BUS 120	Introduction to Business Organization	3
PHY 101	Conceptual Physics	
Or PHY 103	Fundamentals of Physics	4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**16**
	TOTAL CREDITS	**63**

LIBA - Liberal Arts A.A.

Overview

Program Full Description

The Liberal Arts degree is a program of study designed to foster capacities of analysis, critical reflection, problem solving, communication, computation and synthesis of knowledge from different disciplines. The goal of the degree program is to provide students with an intellectual, historical, and social context for recognizing the continuity between the past and future and for drawing on the human capacity of reason to understand human experience, to question the values dimension of human enterprise, and to articulate the results of this process of thinking.

Advisor Notes

The Liberal Arts A.A. program is designed for all students who intend to transfer to a four year degree program, as well as for those who seek to develop intellectual and communications skills.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
SDS 106	Liberal Arts First Year Seminar	1
Elective	Physical Education	1
Elective	Mathematics	3-4
Elective	Lab Science	4
Elective	Social Science	3
	SEMESTER TOTAL	**15-16**
	SECOND SEMESTER	
ENG 106	Introduction to Literature	3
ENG 111	Speech	3
Elective	Mathematics	3-4
Elective	Social Science/Humanities (101or higher)	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15-16**
	THIRD SEMESTER	
Elective	Social Science/Humanities (201 or higher)	3
Elective	Literature	3
Elective	Social Science	3
Elective	General Education	3
Elective	Humanities	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
Elective	Social Science/Humanities/Science/Mathematics	3-4
Elective	Social Science/Humanities/Science/Mathematics	3-4
Elective	Science	3-4
Elective	Free Elective	3
Elective	Free Elective	3
	SEMESTER TOTAL	**15-18**
	TOTAL CREDITS	**60**

MATS - Mathematics A.S.

Overview

Program Full Description

This program is intended for students with an interest and an aptitude in mathematics who plan to transfer to a four-year college or university to prepare for a baccalaureate degree in mathematics.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CIS 155	Introduction to Computer Science – Structured Programming – C++	3
ENG 105	Research and Composition	3
MAT 191	Calculus and Analytic Geometry I	4
PHI 203	Introductory Logic	3
Elective+	Humanities	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
ENG 106	Introduction to Literature	3
MAT 203	Discrete Mathematics	3
MAT 196	Calculus and Analytic Geometry II	4
PHY 210	General Physics I	4
	SEMESTER TOTAL	**14**
	THIRD SEMESTER	
MAT 201	Calculus and Analytic Geometry III	4
PHY 215	General Physics II	4
ENG 111	Speech	3
Elective*	Social Science	3
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
MAT 230	Differential Equations with Linear Algebra	4
PHI 205	Introduction to Ethics	3
Elective*	Social Science	3
Elective+	General Education	6
	SEMESTER TOTAL	**16**
	TOTAL CREDITS	**60**

MBSC - Medical Billing Specialist Certificate

Overview

Program Full Description

This career program is designed to provide students with the medical coding and accounting/basic business skills for entry-level positions in the medical business community. Typical jobs for which graduates are expected to be qualified include medical biller, medical records clerk, insurance coder, and medical office assistant in non-hospital settings. Credits may be applied toward the A.A.S. degree in Accounting, Health Information Technology, and/or Medical Assistant Certificate

Advisor Notes

Recommended Free Elective: HIT 150. Placement testing is available for AOT 112, 113, 114 (Keyboard sequence)

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ACC 160	Principles of Accounting I	3
BIO 163	Anatomy and Physiology I	4
HIT 110	Introduction to Health Information Science	3
HIT 120	Medical Terminology	3
HIT 255	CPT Coding and Other Classification Systems	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
AOT 112	Keyboarding I	1
AOT 113	Keyboarding II	1
AOT 114	Keyboarding III	1
AOT 215	Medical Office Procedures	3
CIS 105	Introduction to Computer Science and Applications	3
HIT 250	ICD-10 CM Coding and Classification System	3
Elective♦	Free Elective	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**31**

MEC - Mechanical Engineering Technology A.A.S.

Overview

Program Full Description

This program prepares students to transfer to a four-year college or university offering a bachelors degree in technology or to obtain entry-level employment in industry. The program provides students with knowledge and experiences in the areas of computer-aided drafting (CAD), robotics, and computer-aided manufacturing (CAM). A student wishing to transfer should confer with the four-year college or university to ensure that the necessary transfer requirements are being met. Students who wish to obtain employment directly upon graduation are expected to be qualified for jobs as a detail and design draftsperson, product designer, machine designer, tool designer, as well as to be involved in industrial planning, manufacturing, and sales.

Advisor Notes

Students enrolling in this program must have completed high school Algebra III or its equivalent (MAT 160). *Mathematics electives are MAT 165, MAT 191 or higher.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
MET 101	Mechanical Print Reading	3
MET 104	Manufacturing	3
Elective*	Mathematics	3-4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15-16**
	SECOND SEMESTER	
BGT 103	Fluid Power	3
ENG 106	Introduction to Literature	
or ENG 107	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
MET 115	Computer-Aided Manufacturing	3
Elective*	Mathematics	3-4
	SEMESTER TOTAL	**16-17**
	THIRD SEMESTER	
BGT 101	Basic Statics	3
MET 106	Mechanical Drafting	4
MTD 201	Basic Mechanisms	4
PHY 201	Introduction to Physics I	4
ENG 111	Speech	3
	SEMESTER TOTAL	**18**
	FOURTH SEMESTER	
BGT 102	Strength of Materials	3
MTD 206	Machine Design	4
MTD 208	Tool Design	4
PHY 202	Introduction to Physics II	4
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**18**
	TOTAL CREDITS	**67**

MEDC - Medical Assistant Certificate

Overview

Program Full Description

Graduates of this program are prepared for entry-level employment as medical assistants in health care providers offices or in those capacities in which medical secretarial and/or basic clinical and laboratory training are required. Jobs for which graduates are expected to be qualified include medical office assistant, medical secretary or medical office manager in single or group medical practices, hospitals, laboratories, public health facilities, armed services, research institutions and other capacities requiring medical secretarial, medical assisting and office management skills

Advisor Notes

To continue in the Medical Assistant courses, the student must achieve a "C" (73%) or above in ALL courses and a C+ (78%) in HIT 120. If a student falls below the "C", he/she will not be able to progress into the subsequent Medical Assistant courses until the course is offered again and has been mastered.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
HIT 120	Medical Terminology	3
MED 103	Clinical Procedures I	3
MED 107	Medical Assisting I	5
	SEMESTER TOTAL	**14**
	SECOND SEMESTER	
HCO 102	Healthcare Management Practices and Technology	3
HIT 255	CPT Coding and Other Classification Systems	3
MED 203	Clinical Procedures II	3
MED 207	Medical Assisting II	5
	SEMESTER TOTAL	**14**
	SUMMER SESSION	
MED 213	Clinical Experience	6
	SEMESTER TOTAL	**6**
	TOTAL CREDITS	**34**

MET - Mechanical Technology A.A.S.

Overview

Program Full Description

This program is designed to prepare students for employment as industry technicians who can construct detail and design drawings. The program provides students with knowledge and experiences in the areas of computer-aided drafting (CAD), 3D modeling, robotics and computer robotics, and computer-aided manufacturing (CAM), so that they are prepared for the high-technology methods employed by industry. Graduates assist engineers and designers in the investigation, experimentation, and development of products, tools, mechanisms, and machines. Efforts continue with graduates preparing appropriate detail and design drawings for use in production. Jobs for which graduates are expected to be qualified are detail draftsperson, design draftsperson, product design, machine design, and tool design.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
MET 101	Mechanical Print Reading	3
MET 104	Manufacturing	3
MAT 130	Industrial Mathematics	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
BGT 103	Fluid Power	3
ENG 106	Introduction to Literature	
or ENG 107	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
MET 115	Computer-Aided Manufacturing	3
PHY 201	Introduction to Physics I	4
	SEMESTER TOTAL	**17**
	THIRD SEMESTER	
BGT 101	Basic Statics	3
MET 106	Mechanical Drafting	4
MTD 201	Basic Mechanisms	4
BGT 240	Industrial Automation	3
	SEMESTER TOTAL	**14**
	FOURTH SEMESTER	
BGT 102	Strength of Materials	3
MTD 206	Machine Design	4
MTD 208	Tool Design	4
ENG 111	Speech	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**17**
	TOTAL CREDITS	**63**

NMT - Nanofabrication Technology A.A.S.

Overview

Program Full Description

This program of study prepares students for technician level jobs, including those in chemical technology, electronics technology, biotechnology, biopharmaceutical labs, micro-technology labs, and material science industry labs. Students will study electronics at LCCC for three semesters and complete the last semester at the nanofabrication facility at Pennsylvania State University (PSU). Industries involved with nanofabrication include microelectronics, optoelectronics, biopharmaceuticals, and materials. Current spending on nanotech by the U.S. government and industry exceeds $3 billion a year. Over the next 10 years, nanotechnology will transform every

industry sector, from advanced materials, agriculture, and chemicals to electronics, energy, defense, and transportation. Students will have an in-depth knowledge of nanofabrication industry practices and procedures.

Advisor Notes

Fourth semester class work is held at PSU's nanofabrication facility. These courses are designed to be capstone courses for the Nanofabrication Technology program. These courses are lab intensive, leveraging the nanofabrication facility at PSU's University Park campus. All lectures will be given in a technology classroom. This classroom is dedicated to the Center for Nanofabrication Manufacturing Technology and thus has a wide variety of specialized, hands-on materials and facilities continually available to students.

+Technical Electives: BGT 240 Industrial Automation, EGR 101 Engineering Graphics, ELE 175 Introduction to Microprocessors, or MAT 150 Introduction to Probability and Statistics.
*Students must elect CHE 108 or any chemistry course or sequence of chemistry courses CHE 108 or higher.

Completion Requirements

Simple Requisites

Requirements

Nanofabrication Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- BGT110 - Fundamentals of Technology
- BGT240 - Industrial Automation
  OR EGR101 - Engineering Graphics
  OR ELE175 - Intro to Microprocessors
  OR MAT150 - Intro Probability & Statistics
- ELE120 - D.C. Circuits
- ELE130 - Digital Fundamentals
- ELE165 - A.C. Circuits
- ELE210L - Electronic Circuits Lab
- SMT211 - Mat Safety & Equip Overview
- SMT212 - Basic Nanofabrication Process
- SMT213 - Thin Films in Nanofabrication
- SMT214 - Lithography for Nanofab
- SMT215 - Materials Modification In Nano
- SMT216 - Charac Pack & Test of Nanofab

General Education Requirements

Complete ALL of the following Courses:

- CHE108 - Essentials of Chemistry
- ENG105 - Research and Composition
- ENG107 - Writing in the Workplace
- MAT130 - Industrial Mathematics
- PHY110 - Elements of Physics

CHE 108 may be substituted by any chemistry course higher than 108.

Electives

Earn at least 6 credits from the following:

- Social Science Electives
  OR Humanities Electives

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence
First Semester

- **BGT 110:** Fundamentals of Technology – 3 Credits

- **ELE 120:** DC Circuits – 4 Credits

- **ELE 130:** Digital Fundamentals – 4 Credits

- **ENG 105:** Research and Composition – 3 Credits

- **MAT 130:** Industrial Mathematics – 3 Credits

Total Credits: 17

Second Semester

- **ELE 165:** AC Circuits – 4 Credits

- **ENG 107:** Writing in the Workplace – 3 Credits

- **CHE 108:** Essentials of Chemistry – 4 Credits

- **Elective:** Social Science/Humanities – 3 Credits

Total Credits: 14

Third Semester

- **ELE 210:** Electronic Circuits – 4 Credits

- **PHY 110:** Elements of Physics – 4 Credits

- **Elective:** Social Science/Humanities – 3 Credits

- **Elective:** Technical – 3 Credits

Total Credits: 14

Fourth Semester *(Course taken at PSU's Nanofabrication Facility)*

- **SMT 211:** Materials, Safety and Equipment, Overview for Nanofabrication – 3 Credits

- **SMT 212:** Basic Nanofabrication Processes – 3 Credits

- **SMT 213:** Thin Film in Nanofabrication – 3 Credits

- **SMT 214:** Lithography for Nanofabrication – 3 Credits

- **SMT 215:** Materials Modification in Nanofabrication – 3 Credits

- **SMT 216:** Characterization, Packaging, and Testing of Nanofabricated Structures – 3 Credits

Total Credits: 18

Total Program Credits: 63

NURC - Practical Nursing Certificate

Overview

Program Full Description

The Practical Nursing Certificate program at Lehigh Carbon Community College at the Main Campus located in Schnecksville, Pennsylvania and the Morgan Center Site located in Tamaqua, Pennsylvania and the Donley Center Site located in Allentown, Pennsylvania is accredited by the: Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000 www.acenursing.org. The most recent accreditation decision made by the ACEN Board of Commissioners for the Practical Nursing Certificate program is Continuing Accreditation. The Practical Nursing Certificate program maintains full approval status with the Pennsylvania State Board of Nursing. This is an integrated college program spanning three semesters. Upon completion of the approved curriculum, the graduate receives a certificate as a practical nurse. Once the graduate successfully completes the Virtual ATI NCLEX-PN review course they are eligible to sit for the National Council Licensing Examination Practical Nursing (NCLEX-PN). The Practical Nursing graduate is prepared to assist in caring for medical and surgical patients, convalescents, and the disabled. Rewarding work experiences are available in extended care facilities, private homes, public health agencies, offices, and clinics.

Advisor Notes

Practical Nursing is a restricted program. Students are accepted on a competitive basis based on available seats and meeting requirements for program entrance. Students interested in applying for Practical Nursing should enter the Health Science A.S. program and complete the prerequisites listed in the Practical Nursing Program Sequence. See the Admission Requirements for details on admission to the program.

To continue in the program, students must maintain a minimum GPA of 2.20 and earn a C+ or better in all nursing courses. Students must earn a grade of "C" or better in required general education requirements to graduate. Students who have earned a "D" or "F" or have withdrawn are readmitted on a space-available basis only. A student may repeat only one nursing course (prefix NUR) in which a "C ", "D", or "F" grade has been earned. Requirements of the program will be the requirements at the time of readmission.

Completion Requirements

Simple Requisites

Requirements

Prerequisites
Type
Prerequisite

Courses Required for Application

Complete ALL of the following Courses:

- BIO163 - Anatomy & Physiology I
- PSY140 - Introduction to Psychology
- SOC150 - Introduction to Sociology
  OR SOC151 - Modern Social Problems

Completed in Health Science (HSCS) program.

Course Required before or during acceptance and before nursing coursework.

Complete ALL of the following Courses:

- BIO164 - Anatomy & Physiology II
- SDS112 - Intro to Practical Nursing
- PSY145 - Human Growth & Development

Additional Comments:

Practical Nursing Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- NUR106 - Nursing I
- NUR116 - Nursing II
- NUR126 - Nursing III

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Pre-Nursing Prerequisites – Completed in Health Science A.S. program

Course Code	Course Title	Credits	Prereqs
	PREREQUISITE COURSES		
BIO 163	Anatomy and Physiology I	4	
PSY 140	Introduction to Psychology	3	
SOC 151	Modern Social Problems	3	
or SOC 150	Introduction to Sociology		
	Prerequisite TOTAL	**10**	
	PRE-NURC SEMESTER(SUMMER)		
SDS 112	Introduction to Practical Nursing	1	BIO 163; PSY 140; SOC 150 or 151
BIO 164	Anatomy and Physiology II	4	BIO 163
PSY 145	Human Growth and Development	3	PSY 140
	SEMESTER TOTAL	**8**	

Practical Nursing Certificate - Program Sequence

	FIRST SEMESTER (FALL)		
NUR 106	Nursing I	11	SDS 112
	SEMESTER TOTAL	**11**	
	SECOND SEMESTER (SPRING)		
NUR 116	Nursing II	11	NUR 106
	SEMESTER TOTAL	**11**	
	THIRD SEMESTER (SUMMER)		
NUR 126	Nursing III	14	NUR 116
	SEMESTER TOTAL	**14**	
	TOTAL CREDITS	**54**	

PHYS - Physics A.S.

Overview

Program Full Description

The Physics program is intended for students who plan to transfer in the following areas: Astronomy, Biophysics, Engineering, Geology, Medicine, Meteorology, Physics, or related areas.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CHE 111	General Chemistry I	4
ENG 105	Research and Composition	3
MAT 191	Calculus and Analytic Geometry I	4
Elective	Social Science	3
Elective	Humanities	3
	SEMESTER TOTAL	**17**
	SECOND SEMESTER	
CHE 112	General Chemistry II	4
ENG 106	Introduction to Literature	3
MAT 196	Calculus and Analytic Geometry II	4
PHY 210	General Physics I	4
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
BIO 110	General Biology I	4
ERG 213	Statics	3
MAT 201	Calculus and Analytic Geometry III	4
PHY 215	General Physics II	4
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
BIO 111	General Biology II	4
ENG 111	Speech	3
Elective	Humanities	3
Elective	Math/Science (Mat 230 Recommended)	3-4
Elective	Social Science	3
	SEMESTER TOTAL	**16-17**
	TOTAL CREDITS	**63**

PLG - Paralegal Studies A.A.S.

Overview

Program Full Description

LCCC's Paralegal Studies is approved by the American Bar Association (ABA) and, because of growth in the paralegal field, provides excellent opportunities for employment

and advancement. Qualified graduates of the Paralegal Studies program can be hired by law firms, banks, title companies, real estate firms, and corporations. Career possibilities include paralegal supervisor, trust coordinator, title searcher, settlement clerk, litigation specialist, contract coordinator, and a variety of other positions. Individuals with legal skills take these skills into a multitude of positions in the business environment, including human resources, records management, legal support, and government. LCCC's Paralegal Studies is approved by the American Bar Association (ABA) and, because of growth in the paralegal field, provides excellent opportunities for employment and advancement. Qualified graduates of the Paralegal Studies program can be hired by law firms, banks, title companies, real estate firms, and corporations. Career possibilities include paralegal supervisor, trust coordinator, title searcher, settlement clerk, litigation specialist, contract coordinator, and a variety of other positions. Individuals with legal skills take these skills into a multitude of positions in the business environment, including human resources, records management, legal support, and government. Students will gain an understanding of what paralegals can accomplish, as well as the limitations imposed by the unauthorized practice of law statute. Internships provide students with practical experience in the paralegal field. Students may also transfer credits to various four-year colleges or universities toward a bachelors degree. The primary goal of the program is to educate students to become paralegals who perform effectively in a variety of legal settings and adapt to changes in the legal environment and law practice. The program prepares students for careers as paralegals working under the supervision of lawyers in either the public or private sectors, as well as striving to encourage and facilitate graduates to pursue advanced degrees. Paralegals may not provide legal services directly to public except as permitted by law. Through a collaborative program of study between LCCC and Kutztown University, LCCC's Paralegal Studies graduates may transfer to Kutztown University to major in English, Political Science, Public Administration, Criminal Justice, History, and Psychology.

Advisor Notes

Required Electives

*The student must select three credits with a PLG prefix from the following list: PLG 125, 135, 225, 227, 228, 230, 235, 240, or 252. The other program elective must be selected from the above list or AOT 112, 113, 114, CJA 201, 240, ENG 107, 111; HIT 140, or any other credit course that is approved by the Paralegal Studies coordinator. General Education electives a student must choose from

Recommended Electives

Program-specific electives a student may choose from

Social Science/Humanities electives: PSC 142, PSC 233, PSC 235, PSC 236, or ECO 201

Program Notes

Up to nine PLG credits will be accepted for transfer into LCCC's PLG program from an ABA-approved program. PLG 200 must be completed at LCCC. PLG credit by assessment is limited to three credits. Total PLG transfer credit and credit by assessment is limited to nine credits.

Students entering the program should have basic keyboarding skills and the ability to type 40 wpm. If a student does not have these skills, the student should enroll in AOT 112, 113, and 114 in the first semester of admission to the program.

Completion Requirements

Simple Requisites

Requirements

Paralegal Studies Requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- PLG105 - Law Office Technology
- PLG115 - Law Firm Experience
- PLG120 - Intro to Paralegal Studies
- PLG150 - Torts and Personal Injury Law
- PLG200 - Civil Litigation & Procedures
- PLG215 - Law Office Management
- PLG220 - Contract Law & Business Organ
- PLG245 - Legal Research and Writing
- PLG250 - Legal Internship
- PLG255 - Legal Writing
- RES110 - Real Estate Law

General Education Requirements

Complete ALL of the following Courses:

- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
- PSY140 - Introduction to Psychology

Electives

Complete ALL of the following Course Sets:

- General Education Electives

- Mathematics Elective
  OR Science Electives
- Mathematics Elective
  OR Science Electives
- Social Science Electives
  OR Humanities Electives

Paralegal Electives

Earn at least 9 credits from the following:

- Paralegal Electives

One program elective may be selected from the above list or AOT 112, 113, 114, CJA 201, 240, ENG 107, 111; HIT 140, or any other credit course that is approved by the Paralegal Studies coordinator.

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
PLG 120	Introduction to Paralegal Studies	3
PLG 150	Torts and Personal Law	3
PLG 115	Law Firm Experience	3
ENG 105	Research and Composition	3
Elective	General Education	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
PLG 200	Civil Litigation and Procedures	3
ENG 106	Introduction to Literature	3
PLG 105	Law Office Technology	3
Elective	Social Science/Humanities	3
Elective	PLG Elective	3
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
PLG 245	Legal Research and Writing	3
RES 110	Real Estate Law	3
PSY 140	Introduction to Psychology	3
Electives	PLG Electives	6
Elective	Mathematics/Science	3-4
	SEMESTER TOTAL	**18-19**
	FOURTH SEMESTER	
PLG 250	Internship	3
PLG 220	Contract Law and Business Organizations	3
PLG 255	Legal Writing	3
PLG 215	Law Office Management	3
Elective	Mathematics/Science	3-4
	SEMESTER TOTAL	**15-16**
	TOTAL CREDITS	**63-65**

PLGC - Paralegal Studies Certificate

Overview

Program Full Description

The American Bar Association (ABA) has approved Lehigh Carbon Community College 's Paralegal Studies program. This certificate program is designed to meet the needs of the student who presently possesses college credit and is interested in pursuing a career as a paralegal.Admission to the certificate program is limited to students that currently possess 30 semester hours of college credit, with grades of "C" or better for each course, of which 18 credits are distributed in at least three of the following acceptable General Education disciplines: English, Math, Science, Humanities and Social Science. The courses must be liberal arts credits and not technical. Admission is

conditional.The growth of the paralegal field provides excellent opportunities for employment and advancement. Qualified graduates of the Paralegal Studies certificate program can be hired by law firms, banks, title companies, real estate firms, corporations, and government agencies. Career possibilities include paralegal supervisor, trust coordinator, title searcher, settlement clerk, litigation specialist, contract coordinator, and a variety of other positions. An individual with legal skills can take those skills into a multitude of positions in the business environment, including but not limited to, human resources, records management, legal support, and government.Students will gain an understanding of what paralegals can accomplish, as well as the limitations imposed by the unauthorized practice of law statute. Paralegals may not provide legal services directly to public except as permitted by law. An internship is available to provide students with practical experience in the paralegal field. The primary goal of the program is to educate students to become paralegals who can perform effectively in a variety of legal settings and adapt to changes in the legal environment and law practice. The program prepares students for careers as paralegals working under the supervision of lawyers in either the public or private sectors.

Advisor Notes

Up to nine PLG credits will be accepted for transfer into LCCC's PLG program from an ABA-approved program. PLG 200 must be completed at LCCC. PLG credit by assessment is limited to three credits. Total PLG transfer credit and credit by assessment is limited to nine credits.

Students entering the program should have basic keyboarding skills and the ability to type 40 wpm. If a student does not have these skills, the student should enroll in AOT 112, 113, and 114 in the first semester of admission to the program.

If you elect an internship, Paralegal Studies students are responsible for locating and selecting internship placement sites. Students are responsible for presenting credential levels required by the internship site. It is the sole discretion of the internship site and future employers as to what level of credentialing is required by the position roles. Students who possess a "record" status may experience limitations in available internship placements and future employment in the paralegal field.

*The student must select nine credits with a PLG prefix from the following list: PLG 125, 135, 225, 227, 228, 230, 235, 240,250 or 252. The other program elective must be selected from the above list or AOT 112, 113 114; CJA 201, 240; ENG 107, HIT 140, RES 110, or any other credit course that is approved by the Paralegal Studies coordinator.

Completion Requirements

Simple Requisites

Requirements

Paralegal Certificate Requirements

Type

Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- PLG105 - Law Office Technology
- PLG120 - Intro to Paralegal Studies
- PLG150 - Torts and Personal Injury Law
- PLG200 - Civil Litigation & Procedures
- PLG215 - Law Office Management
- PLG220 - Contract Law & Business Organ
- PLG245 - Legal Research and Writing
- PLG255 - Legal Writing

Program Electives

Earn at least 12 credits from the following:

- Paralegal Electives

One program elective must be selected from the above list or AOT 112, 113 114; CJA 201, 240; ENG 107, HIT 140, RES 110, or any other credit course that is approved by the Paralegal Studies coordinator.

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
PLG 120	Introduction to Paralegal Studies	3
PLG 150	Torts and Personal Injury Law	3
Elective	PLG Elective	3
	SEMESTER TOTAL	**9**
	SECOND SEMESTER	
PLG 105	Law Office Technology	3
PLG 200	Civil Litigation and Procedures	3
PLG 215	Law Office Management	3
	SEMESTER TOTAL	**9**
	THIRD SEMESTER	
PLG 245	Legal Research and Writing	3
Electives	PLG Electives	6
	SEMESTER TOTAL	**9**
	FOURTH SEMESTER	
PLG 255	Legal Writing	3
PLG 220	Contract Law and Business Organizations	3
Elective	PLG Elective	3
	SEMESTER TOTAL	**9**
	TOTAL CREDITS	**36**

PLGK - Paralegal Studies Certificate in Exclusive Collaboration with Kutztown University BA/BS majors (PLGKC)

Overview

Program Full Description

The American Bar Association (ABA) has approved Lehigh Carbon Community College's Paralegal Studies program. This program is designed for students currently enrolled in a baccalaureate program at Kutztown University. Completion must coincide with graduation from Kutztown University's degree program. See admission requirements for details on enrolling in the program.

The growth of the paralegal field provides excellent opportunities for employment and advancement. Qualified graduates of the Paralegal Studies Certificate in Exclusive Collaboration with Kutztown University BA/BS major can be hired by law firms, banks, title companies, real estate firms, corporations, and government agencies. Career possibilities include paralegal supervisor, trust coordinator, title searcher, settlement clerk, litigation specialist, contract coordinator, and a variety of other positions. An individual with legal skills can take those skills into a multitude of positions in the business environment, including but not limited to, human resources, records management, legal support, and government.

Students will gain an understanding of what paralegals can accomplish, as well as the limitations imposed by the unauthorized practice of law statute. Paralegals may not provide legal services directly to the public except as permitted by law. An internship is available to provide students with practical experience in the paralegal field.

The primary goal of the program is to educate students to become paralegals who can perform effectively in a variety of legal settings and adapt to changes in the legal environment and law practice. The program prepares students for careers as paralegals working under the supervision of lawyers in either the public or private sectors.

Advisor Notes

Students entering the program should have basic keyboarding skills and the ability to type 40 wpm. If a student does not have these skills, the student should enroll in AOT 112, 113, and 114 in the first semester of admission to the program.

If you elect an internship, Paralegal Studies students are responsible for locating and selecting internship placement sites. Students are responsible for presenting credential levels required by the internship site. It is the sole discretion of the internship site and future employers as to what level of credentialing is required by the position roles. Students who possess a "record" status may experience limitations in available internship placements and future employment in the paralegal field.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
PLG 120	Introduction to Paralegal Studies	3
PLG 150	Torts and Personal Injury Law	3
	SEMESTER TOTAL	**6**
	SECOND SEMESTER	
PLG 200	Civil Litigation and Procedures	3
PLG 220	Contract Law and Business Organizations	3
	SEMESTER TOTAL	**6**
	THIRD SEMESTER	
PLG 245	Legal Research and Writing	3
Electives	PLG Elective	3
	SEMESTER TOTAL	**6**
	FOURTH SEMESTER	
PLG 215	Law Office Management	3
	Free Electives	9
	SEMESTER TOTAL	**12**
	TOTAL CREDITS	**30**

PSYS - Psychology A.S.

Overview

Program Full Description

The psychology program is designed for students preparing to enter a program at a four-year college or university, leading to a baccalaureate degree within the diverse field of psychology.

Advisor Notes

It is important that students consider their long-range goals when selecting their courses at LCCC. Students planning on transferring to a B.A. program may have different requirements than students planning on transferring to a B.S. program. In all cases, students should work closely with advisors and faculty in selecting the coursework that will best meet their needs.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
ENG 105	Research and Composition	3
PSY 105	Psychology as a Major	1
PSY 140	Introduction to Psychology	3
MAT 150	Probability and Statistics	3
Or MAT 155	Finite Mathematics for Business and Social Science	
Or MAT 160	College Algebra	
SOC 150	Introduction to Sociology	3
Elective	Humanities	3
	SEMESTER TOTAL	**16**
	SECOND SEMESTER	
BIO 101	Introduction to Biology	4
ENG 106	Introduction to Literature	3
PSY 106	Writing in APA Style	1
PSY 145	Human Growth and Development	3
Or PSY 242	Child Development	
Elective	Humanities	3
	SEMESTER TOTAL	**14**
	THIRD SEMESTER	
PHI 205	Ethics	3
PSY 209	Reading and Writing Research	1
PSY 243	Abnormal Psychology	3
Or PSY 283	Social Psychology	
PSY 255	Introduction to Statistical Analysis	4
Elective	Science/Mathematics	3-4
Elective	Humanities/Social Sciences	3
	SEMESTER TOTAL	**17-18**
	FOURTH SEMESTER	
ENG 111	Speech	3
PSY 256	Research Methods in Psychology	4
Elective	General Education	3
Elective	Humanities/Social Sciences	3
	SEMESTER TOTAL	**13**
	TOTAL CREDITS	**60**

SOWA - Social Work A.A.

Overview

Program Full Description

This program is designed for students preparing to enter a baccalaureate program in social work at four-year colleges or universities. Social workers perform work in three major areas: child, family and schools; medical and public health; and mental health and substance abuse. This program offers coursework that addresses the values, This program is designed for students preparing to enter a baccalaureate program in social work at four-year colleges or universities. Social workers perform work in three major areas: child, family and schools; medical and public health; and mental health and substance abuse. This program offers coursework that addresses the values, knowledge, and skills to help people obtain services; counsel individuals, families and groups; help communities or groups improve social and health services; and pursue social justice by participating in legislative processes. The program emphasizes the development of communication, problem-solving and critical thinking skills.

Advisor Notes

Program Elective: HUS 115, 150, 210, 240; SOC 151, 258; PSY 145, 242, 243.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
HUS 110	Introduction to Human Services	3
HUS 120	Communication and Interviewing	3
SOC 150	Introduction to Sociology	3
PSY 140	Introduction to Psychology	3
ENG 105	Research and Composition	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
HUS 160	Introduction to Counseling Skills and Theories	3
HUS 170	Systems and Process	3
MAT 150	Intro to Probabilities and Statistics	3
HIS 124	United States Since Reconstruction	3
ENG 106	Introduction to Literature	3
PSY 106	Writing in APA	1
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
HUS 180	Human Behavior and the Social Environment	3
SOC 253	Diversity and Inequality	3
BIO 105	Fundamentals of Biology	4
PSC 141	American Federal Government	3
ENG 111	Speech	3
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
SOC 251	The Family	3
Elective	Program Elective	3
PHI 205	Introduction to Ethics	3
BIO 137	Introduction to Environmental Science	4
	SEMESTER TOTAL	**13**
	TOTAL CREDITS	**60**

SPMS - Sport Management A.S.

Overview

Program Full Description

The Sport Management program is designed for the sports enthusiast who desires to coordinate and operate all types of sports programming. This is an interdisciplinary degree that prepares graduates for business and administration with emphasis on the world of sport. Successful completion of this curriculum prepares graduates for transfer into a four-year college and for future employment in exciting positions in the sports industry. Graduates in Sport Management are qualified for positions in professional sports, school and community sports programs, or private health clubs.

Advisor Notes

Students intending to transfer should consult the catalog of the four-year college or university before choosing electives. Physical Education: All PED offerings are appropriate. Mathematics: MAT 118, 120 and 150. Humanities: ENG 154, 201, 205; HIS 126, 225; PHI 201, 205; SPN 105, 106, 205, 206. Laboratory Science: BIO 101, 105; CHE 105; PHY 101, 103.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CIS 105	Introduction to Computers and Applications	3
ENG 111	Speech	3
SPM 101	Introduction to Sport Management	3
ENG 105	Research and Composition	3
HPE 101	Personal and Community Health	2
Elective*	Physical Education	1
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
BUS 120	Introduction to Business Organization	3
ENG 106	Introduction to Literature	3
SPM 102	Sport History and Philosophy	3
PSY 140	Introduction to Psychology	3
Elective	Humanities	3
Elective *	Physical Education	1
	SEMESTER TOTAL	**16**
	THIRD SEMESTER	
BUS 211	Principles of Management	3
Elective	Laboratory Science	4
EXS 107	Care and Prevention of Athletic Injuries	3
Elective *	Physical Education	1
Elective +	Mathematics	3
	SEMESTER TOTAL	**15**
	FOURTH SEMESTER	
BUS 221	Principles of Marketing	3
SPM 103	Science and Wellness in Sport	3
Electives	Social Science	6
Elective	Humanities	3
Elective *	Physical Education	1
	SEMESTER TOTAL	**16**
	TOTAL CREDITS	**61**

TOLC - Tool and Die Machinist Apprenticeship

Overview

Program Full Description

The program has been approved by the Bureau of Apprenticeship and Training and must be taken in conjunction with an approved apprenticeship training program. This program is designed to prepare a student for employment as a tool and die maker or machinist. The program provides students with the related technical knowledge necessary to supplement on-the-job training supplied by the sponsoring employer. Experience gained from the program will be in the area of drafting and design, manufacturing processes, and tooling elements. Jobs obtained from this certificate will be as a tool and die machinist or tool designer.

Advisor Notes

*Students who have satisfactorily completed at least 600 hours of an approved apprenticeship in a tool and die machinist program will be awarded three credits after completing an application and providing appropriate documentation.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
MAT 130	Industrial Mathematics	3
MET 101	Mechanical Print Reading	3
	SEMESTER TOTAL	**6**
	SECOND SEMESTER	
MET 104	Manufacturing Processes	3
MET 111	Computer – Aided Drafting	4
	SEMESTER TOTAL	**7**
	THIRD SEMESTER	
MET 115	Computer – Aided Manufacturing	3
MTD 201	Basic Mechanics	4
	SEMESTER TOTAL	**7**
	FOURTH SEMESTER	
MTD 206	Machine Design	4
MTD 208	Tool Design	4
	Apprenticeship Component	3
	SEMESTER TOTAL	**11**
	TOTAL CREDITS	**31**

VET - Veterinary Technician A.A.S.

Overview

Program Full Description

Veterinary technicians are professionals knowledgeable in the care and handling of animals, basic principles of normal and abnormal life processes, routine laboratory and clinical procedures, and in veterinary medical and surgical nursing. Certified veterinary technicians are employed in veterinary clinics serving large, small, and exotic species. In addition, graduates are employed as veterinary assistants in pharmaceutical settings, research laboratories, animal feed companies, wildlife and zoo centers, and animal shelters. The job market for formally trained veterinary technicians has been growing, and this trend is expected to continue. Lehigh Carbon Community College, working jointly with Northampton Community College, has developed a two-year associate of applied science degree program in this field.Coursework will provide students with a foundation in the basic principles of animal medicine and disease, anatomy and physiology, diagnostic laboratory work, surgical assisting, anesthesia, diagnostic radiology, pharmacology, veterinary medical nursing, laboratory and exotic animal medicine, and veterinary practice management. Students will be given the opportunity to develop technical skills through multiple clinical experiences with live animals. Graduates of this program are prepared to sit for the veterinary technician national board examination. Students that pass the exam may obtain certification. This program has received full accreditation from the American Veterinary Medical Association.Program features: LCCC provides academic and practical experience through a combination of veterinary technology and general education core courses. One third of veterinary

technology courses include laboratory experience including exposure to small, large and exotic animal species. The culminating experience of the program is a summer externship experience during which students can practice their clinical skills at veterinary hospitals. Classes are held on Northampton Community College (NCC) and LCCC campuses. There is a clinical science laboratory on NCC's campus and a veterinary animal teaching facility adjacent to LCCC's campus provided exclusively for the veterinary technician students. Classes are offered during the day and the program takes 2 full years (Fall, Spring and Summer to complete). For additional information, please refer to www.lccc.edu and click on Academics; Veterinary Technician Program. Veterinary technicians are professionals knowledgeable in the care and handling of animals, basic principles of normal and abnormal life processes, routine laboratory and clinical procedures, and in veterinary medical and surgical nursing. Certified veterinary technicians are employed in veterinary clinics serving large, small, and exotic species. In addition, graduates are employed as veterinary assistants in pharmaceutical settings, research laboratories, animal feed companies, wildlife and zoo centers, and animal shelters. The job market for formally trained veterinary technicians has been growing, and this trend is expected to continue. Lehigh Carbon Community College, working jointly with Northampton Community College, has developed a two-year associate of applied science degree program in this field.Coursework will provide students with a foundation in the basic principles of animal medicine and disease, anatomy and physiology, diagnostic laboratory work, surgical assisting, anesthesia, diagnostic radiology, pharmacology, veterinary medical nursing, laboratory and exotic animal medicine, and veterinary practice management. Students will be given the opportunity to develop technical skills through multiple clinical experiences with live animals. Graduates of this program are prepared to sit for the veterinary technician national board examination. Students that pass the exam may obtain certification. This program has received full accreditation from the American Veterinary Medical Association.Program features: LCCC provides academic and practical experience through a combination of veterinary technology and general education core courses. One third of veterinary technology courses include laboratory experience including exposure to small, large and exotic animal species. The culminating experience of the program is a summer externship experience during which students can practice their clinical skills at veterinary hospitals. Classes are held on Northampton Community College (NCC) and LCCC campuses. There is a clinical science laboratory on NCC's campus and a veterinary animal teaching facility adjacent to LCCC's campus provided exclusively for the veterinary technician students. Classes are offered during the day and the program takes 2 full years (Fall, Spring and Summer to complete). For additional information, please refer to www.lccc.edu and click on Academics; Veterinary Technician Program.

Completion Requirements

Simple Requisites

Requirements

Vet Technician Requirements
Type
Completion Requirement

Program Requirements

Complete ALL of the following Courses:

- VET101 - Vet Anatomy & Physiology
- VET105 - Vet Terminology/Communication
- VET110 - Intro To Veterinary Tech
- VET115 - Animal Management & Nutrition
- VET120 - Veterinary Parasitology
- VET125 - Veterinary Clinical Lab Tech
- VET210 - Large Animal Clinical Proced
- VET215 - Animal Disease
- VET218 - Veterinary Pharmacology & Anes
- VET220 - Small Animal Clincial Proced
- VET223 - Veterinary Radiology
- VET225 - Vet Surg Nursing & Anesthesia
- VET228 - Lab Animal Science & Exotics
- VET230 - Veterinary Tech Externship

General Education Requirements

Complete ALL of the following Courses:

- BIO220 - Introduction to Microbiology
- CHE106 - Physiological Chemistry
- CIS105 - Introduction to Computers and Applications
- ENG105 - Research and Composition
- ENG106 - Introduction to Literature
  OR ENG107 - Writing in the Workplace
  OR ENG108 - Creative Nonfiction

CHE 106 must be taken in the first semester or prior to starting the program. It is a prerequisite for VET 125.

Electives

Complete ALL of the following Course Sets:

- General Education Electives
- Mathematics Elective

- Social Science Electives
  OR Humanities Electives
- Social Science Electives
  OR Humanities Electives

Mathematics Electives must include: MAT 105, 121, 150, or 160.

Additional Comments:

No Requirement Level

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
VET 101	Veterinary Anatomy and Physiology	4
VET 105	Veterinary Terminology and Communication	1
VET 110	Introduction to Veterinary Technology	2
ENG 105	Research and Composition	3
CIS 105	Introduction to Computers and Applications	3
CHE 106	Physiological Chemistry	4
	SEMESTER TOTAL	**17**
	SECOND SEMESTER	
VET 115	Animal Management and Nutrition	2
VET 120	Veterinary Parasitology	2
VET125	Veterinary Clinical Laboratory Techniques	4
ENG 106	Introduction to Literature	3
or ENG 107	Writing in the Workplace	
or ENG 108	Creative Nonfiction	
BIO 220	Microbiology	**4**
	SEMESTER TOTAL	**15**
	SUMMER SESSION	
VET 210	Large Animal Clinical Procedure	3
	SEMESTER TOTAL	**3**
	THIRD SEMESTER	
VET 215	Animal Disease	3
VET 218	Veterinary Pharmacology and Anesthesia	3
VET 220	Small Animal Clinical Procedure	4
Elective	Mathematics	3
Elective	Social Science/Humanities	3
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
VET 223	Veterinary Radiology	1.5
VET 225	Veterinary Surgical Nursing and Anesthesia	3
VET 228	Lab Animal Science and Exotics	4
Elective	Social Science/Humanities	3
Elective	General Education	3
	SEMESTER TOTAL	**14.5**
	SUMMER SESSION	
VET 230	Veterinary Technician Externship	3

	SEMESTER TOTAL	**3**
	TOTAL CREDITS	**68.5**

VSM - Visual Media A.A.S.

Overview

Program Full Description

This program is designed for students planning to enter the following industries upon graduation with an Associates Degree: including, but not limited to, digital content production, visual journalism, and commercial photography. Program course work explores career opportunities in these visual communications and digital content production industries through practical experience in state-of-the-art professional facilities and the teaching of fundamental concepts and theories behind the practice. Industry positions include, but are not limited to, commercial photography and video production, visual journalist, digital content coordinator and social media content management. Students utilize industry-standard software, hardware and production techniques as they build professional-quality portfolios of their work and engage in projects with their community.

Advisor Notes

This degree is designed for students who want to enter visual media-related industries and seek employment upon graduation. Students considering or seeking to transfer to a four-institution should enroll in either of the following: Communication AA or TV/Film A.A. ART, CIS, CMN, DMP, MUS Electives: ART 110, 111; CMN 118; DMP 115; MUS 101, 110 Computer Science: CIS 105, 110, 111, 114, 133, 141 Mathematics: MAT 105.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
CMN 101	Introduction to Media Communication	3
ART 107	Digital Design	3
ENG 105	Research and Composition	3
ART 119	Digital Photography I	3
Elective	Mathematics	3
	SEMESTER TOTAL	**15**
	SECOND SEMESTER	
ART 109	Motion Graphics	3
ENG 107	Writing in the Workplace	3
CMN 105	Interpersonal Communication	3
ART 219	Digital Photography II	3
Elective	Computer Science	3-3.5
	SEMESTER TOTAL	**15**
	THIRD SEMESTER	
CMN 204	Video Field Production	3
CMN 205	Introduction to Video Editing	3
ART 229	Commercial Studio Photography	3
Elective	Social Science and Humanities	3
Elective	Laboratory Science	4
	SEMESTER TOTAL	**16**
	FOURTH SEMESTER	
CMN 112	Oral Communication	3
or CMN-ENG-IDS 225	Journalism	
CMN 110	Social Media Strategies	3
DMP 250	Communications Media Practicum	3
Elective	ART, CIS, CMN, DMP, MUS	3
Elective	Social Science and Humanities	3
	SEMESTER TOTAL	**15**
	TOTAL CREDITS	**61**

XISC - Cross Institutional Studies Certificate

Overview

Program Full Description

This is a vocation focused program that prepares students with entry-level knowledge to be successful in employment of their chosen career path. Students study a balanced core of courses in their chosen focus area in addition to courses that enhance their employability skills with the goal of moving them toward their career goals and/or further learning. Graduates will be better prepared to enter into competitive employment in entry-level positions or move on to complete additional education. Entry into this program requires prior approval from an advisor.

Advisor Notes

Required Electives Students must earn a minimum of 12 credits within the same focus area of choice. Courses taken must be level 101 or higher. Below is a list of courses that qualify within each focus area.

Artistic Design and Production - All 100 level ART, all 100 level MUS, CMN 101, CMN 113, CMN 125, CMN 205, DMP 115, DMP 116

Administrative, Support Services, and Hospitality – all 100 level AOT, AOT 206, ACC 110, BUS 120, BUS 130, BUS 141, BUS 152, CMN 105, CMN 120, CIS 105, CIS 180, HRM 105, HRM 120, HRM 130, HRM 131, HRM 170, PLG 115, PLG 120

Technology Design and Support – CMN 105, CMN 120, CFS 105, CFS 115, CIS 105, CIS 111, CIS 112, CIS 114, CIS 118/ART 118, CIS 133, CIS 145, CIS 155, CIS 172, CIS 180, CIS 181, NET 110, NET 111, NET 113, NET 121, ELE 130

Educational Support – All 100 level ECE, CMN 105, CMN 120, EDU 101, EDU 105, EDU 120, EDU 155

Public Health and Safety – All PED, all 100 level CJA, BIO 120, ALH 101, CMN 105, CMN 120, EXS 101, EXS 107, HPE 101, HPE 106, HIT 110, HIT 120, HIT 130, HIT 140, HUS 110

General Trade Studies – CON 102, CON 103, CON 104, CON 105, ELE 155, HAC 104 HAC 119, HAC 125, HAC 131, HAC 132, HAC 135, HAC 140, HAC 150, BGT 110, MET 101, MET 104, MET 105, MET 106, MET 115

General Science Studies – BIO 101, BIO 105, BIO 106, BIO 110, BIO 115, BIO 116, BIO 118, GEO 115

Free Electives should be in an area outside of the student's focus area.

Course Sequence

Course Sequence

Course Code	Course Title	Credits
	FIRST SEMESTER	
Elective	Career focus area	3
Elective	Free Elective	3
SDS 104	Major Decisions	1
	SEMESTER TOTAL	**7**
	SECOND SEMESTER	
Elective	Career focus area	3
Elective	Free Elective	3
SDS 150	Workplace Readiness	2
	SEMESTER TOTAL	**8**
	THIRD SEMESTER	
Elective	Career focus area	3
Elective	Free Elective	3
SDS 151	Work Culture Responsibilities	2
	SEMESTER TOTAL	**8**
	FOURTH SEMESTER	
Elective	Career focus area	3
Elective	Free Elective	3
SDS 152	Career Development	3
	SEMESTER TOTAL	**9**
	TOTAL CREDITS	**32**

All Courses

ACC160 - Principles of Accounting I

Overview

Course Description

An introduction to accounting, providing students with a basic understanding of the recording process as it relates to both service and merchandising businesses. Topics include methods of recording accounting data, the preparation of financial statements and the accounting cycle.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Math Placement - Intro Level

Learning Objectives

Learning Objectives

1. Journalize Accounting Transactions, (including closing entries), adhering to the rules of debits and credits and the normal balances of accounts.
2. Identify the components of a Balance Sheet, Income Statement and Statement of Owner's Equity and define each element of the Accounting Equation.
3. Compute the cost of Inventory using various methods.
4. Compute depreciation using various methods.

ACC161 - Principles of Accounting II

Overview

Course Description
A study of the basic accounting principles for corporations. Topics include payroll, financial statement analysis, equity transactions for partnerships and corporations, long-term liabilities and investments, statement of cash flows, and an introduction to managerial accounting.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ACC160 Principles of Accounting I

Advisement Comments
ACC 160 prereq with a C or better

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Journalize entries for current and non-current liabilities and for equity transactions.		#1, 3
Determine the accounting for forming a partnership and the division of net income or loss.		#1, 3
Determine Financial Statement presentations of Stockholders' Equity and Investments in Securities.		#1, 3
Identify the components of a Statement of Cash Flows using the indirect method.		#1, 3
Define the differences between Managerial and Financial Accounting along with computing a break-even point.		#1, 3
Compute financial ratios; horizontal and vertical analysis of a balance sheet and an income statement.		#1, 3

ACC201 - Intermediate Accounting I

Overview

Course Description
An in-depth study of the financial reporting function. This course examines current technical practices and theory as they pertain to the presentation of financial information to interested parties outside the corporation. Topics of specific discussion include financial statements and related disclosures, revenue and expense measurement, and accounting for assets.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ACC161 Principles of Accounting II

Advisement Comments
Prereq: ACC 161 with a C or better

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define generally accepted accounting principles, the development of accounting standards, and the conceptual framework for the standards setting process.	ACC #1 ACCC #1	#1
Review the accounting process; adjusting entries and the statements of income, comprehensive income, stockholders equity, cash flows and the balance sheet.	ACC #5 ACCC #4	
Calculate the present and future value of lump sum and annuities payments, and understand how these time value of money calculations are used in the accounting process.		#3
Understand the Revenue Recognition rules as they relate to performance obligations and uncertainty.		
Define and apply the accounting and reporting requirements for operating assets; cash, receivables, inventories, and property, plant and equipment and intangibles.		

ACC202 - Intermediate Accounting II

Overview

Course Description
This is a continuation of Intermediate Accounting I. This course continues the in-depth study of the financial reporting process. It includes the study of current technical practices and theory pertaining to the accounting for operating assets, investments, liabilities, pensions, income taxes, owner's equity, earning per share, and the preparation of the statement of cash flows.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ACC201 Intermediate Accounting I

Advisement Comments
Prereq: ACC 201 with a C minus or better

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Accounting for the utilization, disposition and valuation of property, plant and equipment and intangible assets.		
Accounting for the acquisition, disposal and valuation of investments in debt and equity investments; and their impact on net income and comprehensive income.		
Accounting and reporting of current liabilities, notes and bonds payable, leases, income taxes and pensions.		
Presentation of stockholders equity, basic and diluted earnings per share, and stock based compensation.	ACC #3 ACCC #3	
Prepare and analyze the cash flows statement.		#3

ACC203 - Cost/Managerial Accounting

Overview

Course Description
A study of cost and managerial principles and procedures as applied to manufacturing, merchandising and service organizations. Topics include cost terminology, job order and process costing, cost-volume-profit analysis, segment reporting, activity-based costing, operating budgets, variance analysis and capital budgets.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ACC161 Principles of Accounting II

Advisement Comments
Prereq: ACC 161 with a C minus or better

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Classify costs, calculate the cost of manufacturing products and prepare financial reports for a manufacturing company.	ACC #6 ACCC #5	
Define cost relationships; identify, understand and utilize appropriate tools for management decision making.	ACC #2 ACCC #2 BUAA #3	1, 3
Prepare planning and flexible budgets, analyze variances and evaluate capital spending proposals.		

ACC205 - Income Tax Accounting

Overview

Course Description
This course covers the underlying principles of the Internal Revenue Code, including the practical application of its tax rules and the preparation of income tax returns. Accounting for taxes is also covered. Students will use income tax software and the IRS website to practice preparing tax returns.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Know how to withhold federal income tax and FICA tax on wages and other income.		#1, 3
Know the various forms to be used when working with federal income tax withholding.		#1, 3
Know what the federal income tax base is and how the income tax liability or refund is computed.		#1, 3
Be able to prepare the income tax return -for single filers with no dependents.		#1, 3
Know the various forms and schedules available to an individual taxpayer for preparing his or her tax return.		#1, 3
Be able to prepare the basic federal income tax return for individuals (Form 1040) plus the supporting schedules and forms needed in the preparation of the final return.		1, 3, 4, 5, 6, 8, 9
Be able to calculate a taxpayer's estimated income and self-employment taxes.		#1, 3
Know how to report an individual taxpayer's income.		#1, 3
Know what adjustments to income consist of, how to prepare the forms and claim the deductions.		#1, 3
Be able to determine itemized deductions by use of Schedule A.		#1, 3
Know how to utilize the IRS website to obtain tax forms, publications, and for tax research purposes.		#1, 2, 3, 5

ACC262 - Accounting Information Systems

Overview

Course Description

Introduces students to the concepts underlying information systems and their relationship to accounting functions in an organization. Students will use QuickBooks to understand information systems, planning, and systems analysis as it relates to accounting.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ACC161 Principles of Accounting II, CIS105 Intro to Comp & Applications

Advisement Comments

The students will spend extensive time in class and outside of class on the computer. It is essential that each student have access to a computer both during class and outside of the class period. There is always open lab time which the student can utilize on campus for class assignments.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define the nature of accounting information, understand the accounting cycle, and recognize the elements of internal control.		1
Demonstrate how to document an Accounting Information System (AIS).		1
Recognize the role Information Technology has in AIS.		1
Describe business processes.		1
Explain how AIS connects to other areas of business.		1
Demonstrate operating QuickBooks in a business environment.	ACC PO#7	1, 5

ADN150 - Fundamentals of Nursing

Overview

Course Description

This course introduces the student to nursing knowledge integrating information from biological, social and behavioral sciences in the delivery of nursing care. Fundamental nursing skills are developed to assist humans to promote, maintain and restore health integrity of assigned clients by utilizing evidence based practice, technology and resources for the achievement of quality patient outcomes. An on-line module will introduce pharmacology to the student. This module provides basic pharmacology concepts and principles to nursing students. The content of the module introduces students to the basics of pharmacology and develops the student's theoretical knowledge base of pharmacotherapeutics for nursing practice. Major drug classifications and specific agents will be discussed in relation to pharmacodynamics, pharmacokinetics, therapeutic uses, adverse reactions and precautions.

The nursing process is introduced and developed to provide safe, effective, quality care to individuals across the lifespan. This will include building critical thinking skills that aid the decision making process in the delivery of safe competent nursing care.

An introduction to how to communicate therapeutically will be accomplished to ensure safe, quality care to individuals.

An introduction to inter-personal, evidence based care that is socially responsible, environmentally sounds, and culturally/spiritually sensitive will be proposed.

Students will relate principles of accountability, advocacy and professionalism to the framework of legal/ethical standards of the nursing profession. Inherent in this is the development of a commitment to life-long learning as a professional nurse and a contributing member of the health care team by the development of attitudes, values, and personal qualities of the nursing profession.

Concurrent clinical laboratory experience introduces the student to nursing practice in hospitals to enable the student to apply the knowledge and skills learned in the classroom and laboratory. This forms the basis for commitment to the life-long role of a professional nurse and member of the health care team.

Total Credits

Total Credit Hours:

8

Billing Hours ⓘ

Billing Hours Min:

8

Lecture Hours

Lecture Hours (per week):

6

Requirements

Prerequisites

SDS110 Intro to Assoc. Degree Nursing, BIO220 Introduction to Microbiology, ENG106 Introduction to Literature, PSY145 Human Growth & Development, SOC150 Introduction to Sociology

Cross Listing

ADN150L Intro to Basic Needs Lab

Advisement Comments
Prereq option: SOC 150 or SOC 151

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARD	ADN PROGRAM OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Develop information from nursing, biological, social and behavioral sciences in the delivery of nursing care.	# 4.3, 4.6	#1	#1, 2, 4, 7, 9
2. Identify behaviors which promote, maintain and restore health integrity of assigned clients by utilizing evidence based practice, technology and resources for the achievement of quality patient outcomes.	4.6,4.7	#2	#1,5
3. Build a beginning knowledge of the nursing process to provide safe, cost effective, quality care to individuals across the lifespan.	4.3, 4.6, 4.9	#3	#1,8
4. Demonstrate how to communicate therapeutically to ensure safe, quality care to individuals, families, and communities.	4.3, 4.6, 4.9	#4	#2
5. Relate inter-professional, evidence based care that is socially responsible, environmentally sound, and culturally/spiritually sensitive to diverse populations within select health care delivery systems.	4.5	#4, 5	#2, 7
6. Relate accountability, advocacy and professionalism within the framework of legal and ethical standards of the nursing profession.	4.3, 4.6	#6	# 4, 9
7. Explain attitudes, values and personal qualities that reflect a commitment to life-long learning as a professional nurse and member of the health care team.	4.6	#7	#6

ADN150K - Intro to Basic Hum Needs Cl

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
6.5

ADN150L - Intro to Basic Needs Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

Other Hours

Other Total Hours:
0

Requirements

Cross Listing
ADN150 Fundamentals of Nursing

ADN160 - Medical Surgical Nursing I

Overview

Course Description
This course continues to incorporate nursing knowledge from biological, social, and behavioral sciences into the delivery of nursing care of adults. Particular emphasis is given to concentrated nursing knowledge of oxygenation, circulation and hemostasis, elimination, metabolic, endocrine and sensory adult care needs. Health intergrity of assigned adults is promoted, maintained and restored using evidence based practice, technology and resources for the achievement of high quality outcomes. Application of the nursing process occurs ensuring safe, cost effective, quality care of individuals, families and communites. Therapeutic communication skills are further developed to endure safe, quality care to adults. Selected health care delivery system environments are used to apply inter-professional, evidence based care that is socially responisble, environmentally sound, and culturally/spirituyally sensitive to diverse populations. Students will use principles of accountability, advocacy, and professionalisms within the framework of legal and ethical standards of the nursing procession in actual clinical settings. Students will differentiate the nursing role from other members of the health care team further developing attitudes, values and personal qualities that reflect commitment to lifelong learning as a professional nurse.During concurrent clinical laboratory experience, the student will provide holistic nursing care to meet the health care needs of selected clients in the clinical agencies to enable the student to apply knowledge and skills learned in the classroom, clinical skills laboratory and the previous course clinical settings.

Total Credits

Total Credit Hours:
7

Billing Hours

Billing Hours Min:
7

Lecture Hours

Lecture Hours (per week):
4

Other Hours

Other Total Hours:
13

Requirements

Prerequisites
ADN150 Fundamentals of Nursing

Cross Listing
ADN160K Medical Surgical Nursing I Cl

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARD	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCIES
1. Incorporate information from nursing, biological, social, and behavioral sciences in the delivery of nursing care.	# 4.3, 4.6	# 1	# 1,7
2. Prioritize behaviors which promote, maintain, and restore health integrity of assigned clients by utilizing evidence based practice technology, and resources for the achievement of quality client outcomes.	# 4.6, 4.7	# 2	# 1,5
3. Apply the nursing process to provide safe, cost effective care to individuals, families, and communities.	# 4.3, 4.6, 4.9	# 3	# 1, 8
4. Explore how to communicate therapeutically to ensure safe, quality care.	# 4.3, 4.6, 4.9	# 4	# 2
5. Apply inter-professional, evidence based care that is socially responsible, environmentally sound, and culturally/ spiritually sensitive to diverse populations within select health care delivery systems.	# 4.5	# 4, 5	# 2, 7
6. Discusses how accountability, advocacy, and professionalism within the framework of legal and ethical standards of the nursing profession.	# 4.3 4.6	# 6	# 4, 9
7. Identifies attitudes, values and personal qualities that reflect a commitment to lifelong learning as a professional nurse and member of the health care team.	# 4.6	# 7	1,3,6,9

ADN160K - Medical Surgical Nursing I Cl

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
13

Requirements

Cross Listing
ADN160 Medical Surgical Nursing I

ADN173 - LPN Transition to AAS Nursing

Overview

Course Description
Focuses on health care practices to meet adult health needs along the health-illness continuum. Particular emphasis is given to adaptation to respiratory, cardiovascular, renal, genitourinary, metabolic/endocrine and sensory needs. Fundamental nursing skills are reviewed and strengthened to meet basic human needs. Previous health care experiences of the student are used to further develop knowledge of the cultural-spiritual aspects of nursing. The nursing process is used as a problem-solving tool to develop an individual plan of care. Fundamental principles of therapeutic communication are reinforced and applied in the interaction with individuals, families ad groups. Teaching-learning strategies to enhance promotion, maintenance, and restoration of health are developed. Ethical-legal principles and practices are reviewed and applied in the health care environment. Dependent and independent responsibilities and functions of the nurse as a member of the nursing profession are examined and the role of the professional nurse is differentiated from others in the changing health care environment. Pharmacologic and nutritional principles are intergrated throughout the

course. During concurrent clinical laboratory experience, the student will provide holistic nursing care to meet the health care needs of selected clients in the clinical agencies to enable the student to apply knowledge and skills learned in the classroom. Students will use advanced technologies in the clinical area to reinforce learning. Advanced technologies are used in the clinical setting to enhance student learning.

Total Credits

Total Credit Hours:
5

Billing Hours

Billing Hours Min:
5

Lecture Hours

Lecture Hours (per week):
4

Requirements

Prerequisites
SDS111 Intro LPN to Assoc. Deg. Nurs., BIO220 Introduction to Microbiology, ENG106 Introduction to Literature, PSY145 Human Growth & Development, SOC150 Introduction to Sociology

Cross Listing
ADN173K Adv Transition in Nur Clinical

Advisement Comments
Prereq option: SOC 150 or SOC 151

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
1. Discuss the relationship between humans, nursing, health and the environment.	# 4.1	1,5	
2. Prioritize the client's and significant others' health care needs in moving toward self-actualization.	#4.6	#2,7	
3. Analyze the adaptive, maladaptive responses to stimuli affecting the movement of the client toward high-level wellness.	#4.6	#2	1,3
4. Discuss the effects of stimuli such as culture, economics, environment, and spirituality on the health of the client and significant other.	#4.5	#3,5	#7
5. Use the nursing process to critically think about adult health needs and develop teaching-learning strategies to meet human health needs.	#4.1,4.6	#3	# 1,3,8
6. Explore the variety of therapeutic verbal and nonverbal communication skills necessary to interact with clients and significant others.	#4.5	#4	#2
7. Discuss ethical-legal standards mandated by the Nurse Practice Act and the ANA Code of Ethics.	#4.6	#6	#9
8. Identify the role of the professional nurse in (and not limited to) professional relationships, self-evaluation, team building, and continuing education.	#4.5	#7	#4

ADN173K - Adv Transition in Nur Clinical

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
6.5

Requirements

Cross Listing
ADN173 LPN Transition to AAS Nursing

ADN205 - Maternal Newborn Nursing

Overview

Course Description
Focuses on the health care needs of the traditional and nontraditional family during the childbearing years. The role of individuals, families and groups in an ever-changing health care environment is analyzed. Emphasis is placed on roles, relationships, adaptive and maladaptive responses experienced in the expanding family. The impact of cultural-spiritual needs on individuals, families and groups is compared. The nursing process is used to meet and promote adaptive responses to the health needs of the expanding family. Therapeutic communication is applied in the promotion, maintenance and restoration of health. Teaching-learning interventions appropriate for parenhood, family living, sexuality, and health care practices are emphasized. Ethical-legal principles and the role of the professional nurse are incorporated within the ever-changing health care delivery system. During concurrent clinical laboratory experience, the student will provide health care using holistic concepts to meet the needs of selected patients in the hospital or appropriate community settings to enable the student to apply knowledge and skills learned in the classroom.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
6.5

Requirements

Prerequisites
ADN160 Medical Surgical Nursing I

Corequisites
ADN215 Pediatric Nursing

Cross Listing
ADN205K Maternal Newborn Nursing CI

Advisement Comments
Students are highly encouraged to meet with the course instructor especially if they have academic needs. Office hours are posted and available online and in the course documents. The majority of office hours are scheduled directly before or after class.

Prereq option: ADN 160 or ADN 173

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGE-WIDE COMPETENCY
Synthesize information from nursing, biological, social and behavioral sciences into the delivery of nursing care to women, infants, their families and the community.	CSC 1, 2, 4, 5, 6, 7, 8 Program #1
Prioritize interventions which promote, maintain and restore health integrity of assigned clients by utilizing data to critically monitor the outcomes of care based on evidence-based practice, technology and resources for the achievement of quality client outcomes to women, infants, their families and the community.	CSC 3, 5, 6, 7, 8 Program #2
Utilize the nursing process to critically think and provide safe, patient-centered care with sensitivity and respect for the diversity of women, infants, their families and the community.	CSC 1, 2, 3, 4, 5, 7 Program #3
Apply a variety of verbal/non-verbal therapeutic communication skills to ensure safe, quality care to women, infants, their families and the community.	CSC 2, 4, 5, 6, 7 Program #4
Function effectively within nursing and inter-professional teams, to provide evidence-based care that is socially responsible, environmentally sound, and culturally/spiritually sensitive to the diverse populations of women, infants, their families and the community.	CSC 1, 2, 4, 5, 6, 7, 8 Program #5
Demonstrate accountability, advocacy and professionalism within the framework of legal and ethical standards of the nursing profession.	CSC 2, 5, 7, 9 Program #6
Integrate advanced theoretical knowledge and clinical skills to develop attitudes, values and personal qualities that reflect a commitment to lifelong learning as a professional nurse and member of the health care team.	CSC 2, 3, 4, 7, 9 Program #7

ADN205K - Maternal Newborn Nursing Cl

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
6.5

Requirements

Cross Listing
ADN205 Maternal Newborn Nursing

ADN215 - Pediatric Nursing

Overview

Course Description
Focuses on the health care needs of the developing family. This course introduces the student to pediatric nursing knowledge integrating information from biological, social and behavorial sciences in the delivery of family-centered care. Fundamental nursing skills are further developed to assist families to promote, maintain and restore health integrity of pediatric clients by utilizing evidence based practice, technology and resources for the achievement of quality patient outcomes. Integrated in the course are the

physiologic, psychosocial, and cultural-spiritual needs of the developing family in an ever-changing health care environment. The nursing process is used to promote health, prevent abuse, and meet the needs of the child from birth to adolescence. Therapeutic communication is used to promote adaptation and maximize human potential. Emphasis is on teaching-learning interventions appropriate for the developmental and chronological age of the child. Ethical-legal principles and the role of the professional nurse are incorporated within the ever-changing health care delivery system.During concurrent clinical laboratory experience, the student will provide health care using holistic concepts to meet the needs of selected patients in the hospital or appropriate community settings to enable the student to apply knowledge and skills learned in the classroom. The student will continue to develop attitudes, values, and personal qualities that reflect a commitment to life-long learning, which in turn fosters transitioning into the role of the professional nurse.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
6.5

Requirements

Prerequisites
ADN160 Medical Surgical Nursing I

Corequisites
ADN205 Maternal Newborn Nursing

Cross Listing
ADN215K Pediatric Nursing Cl

Advisement Comments
Prereq option: ADN 160 or ADN 173

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARD	PROGRAM OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Develop and synthesize information from nursing, biological, social and behavioral sciences into the delivery of family-centered care.	2, 3, 4, 6	#1	#1, 2, 4, 7, 9
2. Identify behaviors which promote, maintain and restore health integrity of assigned pediatric clients by utilizing evidence based practice, technology and resources for the achievement of quality patient outcomes.	2, 3, 4, 5, 6	#2	#2, 3, 6, 7, 8
3. Build on the knowledge of the nursing process to provide quality, safe, cost effective family-centered care.	2, 3, 4, 6	#3, 4	#1, 2, 3, 4, 5, 6, 8, 9
4. Demonstrate how to communicate therapeutically to ensure safe, quality care to children and families, utilizing principles of growth and development.	3, 4, 6	#4	#2, 6, 7, 8
5. Relate inter-professional, evidence based care that is socially responsible, environmentally sounds, and culturally/spiritually sensitive to diverse populations within select pediatric health care delivery systems.	1, 4	#5	#2, 4, 6, 7, 9
6. Relate accountability, advocacy and professionalism within the framework of legal and ethical standards of caring for pediatric clients and their families.	3, 4, 5	#6	#1, 2, 6, 7, 8, 9
7. Develops attitudes, values and personal qualities that reflect a commitment to life-long learning as a professional nurse and member of the health care team.	1, 3, 4, 6	#7	#1, 3, 4, 6, 7, 8, 9

ADN215K - Pediatric Nursing Cl

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
6.5

Requirements

Cross Listing
ADN215 Pediatric Nursing

ADN225 - Mental Health Nursing

Overview

Course Description
Focuses on the psychosocial needs of individuals, families and groups. Holistic nursing is practiced in primary, secondary and tertiary environments. The impact of cultural-spiritual needs on the psychologic and social structure of clients, families and community is explored. The nursing process is used to meet psychosocial needs by promotion of adaptive responses to increase self-esteem and self-awareness. Therapeutic communication is emphasized and provides the framework for the nurse-client relationship. Teaching-learning strategies are used to enhance promotion, maintenance and restoration of mental health. Ethical-legal considerations are applied to the interventions with mental health clients, their families and groups. Professional role responsibilities are related to the ever-changing health care delivery system. Crisis intervention, systems, family, group and organizational theories are discussed. Psychopharmacology is included. During concurrent clinical laboratory experience, the student will provide holistic health care to meet the psychosocial needs of selected clients who are in the hospital or appropriate community settings to enable the student to apply knowledge and skills learned in the classroom.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
6.5

Requirements

Prerequisites
ADN160 Medical Surgical Nursing I

Corequisites
ADN235 Medical Surgical Nursing II

Cross Listing
ADN225L Human Psychosocial Needs Lab

Advisement Comments
Prereq options: ADN 160 or ADN 173

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARD	PROGRAM OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Apply psychiatric mental health concepts/ communication techniques/theories/ interventions to clients experiencing psychiatric disorders.	#4 4.2,4.3,4.4,4.5 &4.11	#1 2 & 4	#1, 2, 4, 6
2. Integrate the nursing process as a critical thinking tool to assess and provide safe, cost-effective, quality care to clients/families/group situations.	#4 4.5, 4.9	#1, 3	#1, 7 & 8
3. Establish therapeutic psychosocial relationships with clients/families/groups through the integration of a variety of verbal and nonverbal therapeutic communication skills.	#4 4.5, 4.6 &4.11	#4, 5	#2,7
4. Implement therapeutic nursing interventions within an environment of safety.	#3, 3.1, 3.8 #4, 4.6, 4.9	#1,2,5	#1,8
5. Identify teaching/learning strategies for clients/families/groups with psychosocial needs to promote, maintain, and/or restore psychosocial health.	#4 4.5, 4.9, 4.11	#1,2,4,5,	#1,2,4,5,6 &7
6. Demonstrate accountability, advocacy and professionalism within the framework of legal and ethical standards mandated by the Nurse Practice Act and the ANA Code of Ethics.	#1, 1.5, 1.7 #2, 2.1 #3, 3.1,3.5 #4, 4.1, 4.4, 4.8, 4.9 #6, 6.1	#6	#9
7. Use evidence-based practice when planning client care to demonstrate professional nursing at an associate degree level.	#4, 4.1, 4.4, 4.9, 4.11	#5,6,7	#1,3, 8
8. Practice in accordance with the Behavioral Health Care National Patient Safety Goals.	#4, 4.1, 4.3, 4.6, 4.8, 4.9, 4.11	#5,6,7	#1,8

ADN225K - Mental Health Nursing Cl

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
6.5

ADN225L - Human Psychosocial Needs Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
6.5

Requirements

Cross Listing
ADN225 Mental Health Nursing

ADN235 - Medical Surgical Nursing II

Overview

Course Description
Provides a nursing theory base in meeting complex health care needs of the acutely and/or chronically ill adults. Advanced concepts are provided and correlated to theoretical knowledge and technical skills to meet holistic health care needs in a complex environment. Advanced concept of gastrointestinal, musculoskeletal, immune, hepatic, burn, neurologic, respiratory, renal, and cardiac needs are included. The impact of cultural-spiritual needs on the client and family is examined. The nursing process is used as a basis for correlation between theoretical knowledge and clinical practice and to promote adaptive responses. Emphasis is on the nursing process from assessment through evaluation. The student develops complex problem-solving skills, decision-making skills, and increases the ability to create change within the health care delivery system. Therapeutic communication and teaching-learning skills are focused on clients with alteration in communication and learning. Ethical-legal considerations are applied to the adult client with complex health needs. Differentiating the professional nursing role from others in the ever-changing health care delivery system is accomplished. During concurrent clinical laboratory experience the student will provide holistic health care to meet the health needs of selected patients in the hospital and nursing home to enable the student to integrate knowledge and skills learned in the classroom.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
6.5

Requirements

Prerequisites
ADN160 Medical Surgical Nursing I

Corequisites
ADN225 Mental Health Nursing

Cross Listing
ADN235K Medical Surg Nursing II Cl

Advisement Comments
Prereq option: ADN 160 or ADN 173

Students are highly encouraged to meet with the course instructor especially if they have academic needs. Office hours are posted and available online Canvas as well as the course Powerpoints. The majority of office hours are scheduled directly before or after class.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGE WIDE STUDENT COMPETENCY
1. Synthesize information from nursing, biological, social, and behavioral sciences into the delivery of nursing care.	#1-Think critically (CSC) #3-Apply quantitative reasoning (CSC) #6-Apply information literacy skills #8-Apply scientific reasoning
2. Prioritize interventions which promote, maintain, and restore health integrity of clients by utilizing evidence based practice, technology and resources for the achievement of quality client outcomes.	#3-Apply quantitative reasoning (CSC) #5-Use current technology effectively (CSC) #6-Apply information literacy skills
3. Utilize the nursing process to critically think and ensure safe, quality care to individual, families, and communities.	#1-Think critically (CSC) #8-Apply scientific reasoning #9-Evaluate ethical aspects of decision making
4. Apply a variety of verbal and nonverbal therapeutic communication skills to ensure safe, quality care in assisting of meeting the complex health care needs of individuals, families, and groups.	#2-Communicate effectively (CSC) #4-Participate cooperatively in a team (CSC) #7-Analyze human diversity
5. Provide inter-professional, evidence based care that is socially responsible, environmentally sound, and culturally/spiritually sensitive to diverse populations within the health care delivery systems.	#3-Apply quantitative reasoning (CSC) #5-Use current technology effectively (CSC) #7-Analyze human diversity
6. Demonstrate accountability, advocacy and professionalism within the framework of legal and ethical standards of the nursing profession.	#2-Communicate effectively (CSC) #8-Apply scientific reasoning #9-Evaluate ethical aspects of decision making
7. Integrate advanced theoretical knowledge and clinical skills to develop attitudes, values, and personal qualities that reflect a commitment to lifelong learning as a professional nurse and a member of the health team.	#4-Participate cooperatively in a team (CSC) #6-Apply information literacy skills

ADN235K - Medical Surg Nursing II Cl

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
6.5

Requirements

Cross Listing
ADN235 Medical Surgical Nursing II

ADN245 - Nursing Leadership

Overview

Course Description
Emphasizes the autonomous and evolving role of the professional nurse. The health needs of individuals, families and groups and how they are influenced by society and the environment are discussed. Disaster nursing responsibilities are explored. The impact of cultural-spiritual needs on the delivery of health care within the ever-changing health care delivery system is analyzed. The nursing process is used to further develop problem-solving and decision-making skills, itilizing evidenced based practice, technology and resources for the achievement of safe, quality patient outcomes. Interpersonal communication techniques to enhance professional growth will be investigated. Ethical-legal rights and duties will be synthesized. The importance of a commitment to life long learning and the evolving role of the professional nurse are discussed. Management styles, leadership roles and nursing research are analyzed. Role responsibility, accountability and delegation are discussed.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
ADN160 Medical Surgical Nursing I

Corequisites
ADN225 Mental Health Nursing, ADN235 Medical Surgical Nursing II

Advisement Comments
Prereq option: ADN 160 or ADN 173

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE (ADN) AND/OR COLLEGEWIDE STUDENT COMPETENCY (CWC)
1. Develop and synthesize information from nursing, biological, social and behavioral sciences as well as nursing theory in problem solving, decision making, and formulating creative politics to meet the health care needs of individuals, families, groups, and communities.	Think critically (CWC) Apply scientific reasoning (CWC) Synthesize information from nursing, biological, social and behavioral sciences into the delivery of nursing care (ADN)
2. Identify strategies to facilitate the movement toward self-actualization utilizing evidenced based practice, technology, and resources to provide quality outcomes for individuals, families, groups, and communities.	Think critically (CWC) Analyze human diversity (CWC) Use current technology effectively (CWC) Apply information literacy skills (CWC) Promote, maintain and restore health integrity of assigned clients by utilizing evidence-based practice, technology, and resources for the achievement of quality patient/client outcomes (ADN)
3. Relate inter-professional, evidence based care that is socially responsible, environmentally sound, and culturally/spiritually sensitive to diverse populations within evolving health care delivery systems.	Analyze human diversity (CWC) Apply information literacy skills (CWC) Provide inter-professional, evidence-based care that is socially responsible, environmentally sounds, and culturally/spiritually sensitive to diverse populations within select health care delivery systems (ADN).
4. Expand use of the nursing process utilizing critical thinking skills to provide safe, quality care to meet the needs of individuals, families, groups, and the community.	Think critically (CWC) Apply scientific reasoning (CWC) Use the nursing process to provide safe, cost effective, quality care to individuals, families, and communities across the lifespan (ADN).
5. Employ a variety of verbal and nonverbal therapeutic communication skills to assist individuals, families, groups, and communities to reach high level wellness.	Communicate effectively (CWC) Analyze human diversity (CWC) Communicate therapeutically to ensure safe, quality care to individuals, families and communities (ADN).
6. Analyze the ethical and legal issues experienced by individuals, families, groups, and communities within the current health care delivery system.	Evaluate ethical aspects of decision making (CWC) Think critically (CWC) Demonstrate accountability, advocacy, and professionalism within the framework of legal and ethical standards of the nursing profession (ADN).
7. Develop attitudes, values, and personal qualities that reflect a commitment to life-long learning to effectively assume the role of the professional nurse.	Participate cooperatively within a team (CWC) Develop attitudes, values, and personal qualities that reflect a commitment to lifelong learning as a professional nurse and member of the health care team (ADN).

ADN255 - Nursing Capstone

Overview

Course Description

This review of online, live and self-paced learning modalities allows the ADN student to utilize a variety of learning styles to assist in preparing for national licensure. The review is intended to build confidence, review relevant content, and develop strategies to prepare for the NCLEX-RN. The preparation is based on the NCSBN blueprint and focuses on content areas of; management of care, safety and infection control, health promotion and maintenance, psychosocial integrity, basic comfort and care, pharmacological and parental therapies, reduction of risk potential and physiological adaptation.

Total Credits

Total Credit Hours:

2

Billing Hours

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

2

Requirements

Corequisites

ADN235 Medical Surgical Nursing II

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Apply strategies to completing NCLEX-RN exam based on question formats and structure	1,2,3,4,5,6,7	
Develop and apply successful test taking strategies	1,2,3,4,5,6,7	
Review key concepts and areas of content review that are identified as areas to focus on to ensure success on the 1st attempt of taking the NCLEX-RN exam	1,2,3,4,5,6,7	
Develop increased confidence in answering NCLEX style questions based on clinical judgement.	1,2,3,4,5,6,7	

AOT112 - Keyboarding I

Overview

Course Description

Lays the foundations for the development of standard keyboarding dexterity. It is the first of several courses designed to build mastery of the computer keyboard (alphabet and numbers) as an educational tool and as a marketable skill.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

0

Lecture Hours

Lecture Hours (per week):

1

Lab Hours

Lab Hours (per week):
0.5

AOT113 - Keyboarding II

Overview

Course Description
Continues laying the foundations for the development of standard keyboarding dexterity. It is the second of several courses designed to build mastery of the computer keyboard, (alphabet, numbers and symbols) as an educational tool and as a marketable skill.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Lab Hours

Lab Hours (per week):
0.5

AOT114 - Keyboarding III

Overview

Course Description
Is the third of several courses designed to build mastery of the computer keyboard, (alphabet, numbers and symbols) as an educational tool and as a marketable skill.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Lab Hours

Lab Hours (per week):
0.5

AOT206 - Office Procedures

Overview

Course Description

Designed to prepare the administrative professional to fulfill a challenging role in today's workplace. Employees must be able to adjust to a diversified workforce with emerging technologies and be prepared to function in an expanding and global marketplace. This course equips users to better handle these changes by providing instruction and activities directed toward technology, communications, human relations, time and organization management, finances, decision making, creative thinking, and lifelong learning. applications.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the characteristics of ethical work behavior and effective workplace teams.	ADMC #2	9
Demonstrate effective written communication.	ADMC #3	2
Demonstrate the proper maintenance of physical records, electronic records, and mail.	ADMC #1	
Describe the elements of coordinating domestic and international business travel.	ADMC #1	1
Recognize basic financial records.	ADMC #2	
Explain the elements of a business meeting and how to properly conduct a business meeting	ADMC #2	

AOT215 - Medical Office Procedures

Overview

Course Description

Introduces and simulates the procedural duties and tasks used in administrative medical offices. A specific emphasis is placed on proper preparation, especially in coding, and submission of medical insurance claims. Students will be introduced to the administrative and clerical responsibilities encountered in the medical office including scheduling appointments, patient records, filing and records management, legal and financial responsibilities. Students will receive hands-on practice in medical billing and insurance.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites
HIT120 Medical Terminology

Corequisites
AOT112 Keyboarding I

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate entry-level administrative technology skills, including office computer operations and insurance billing/collection procedures.	MBSC #1	1
Demonstrate proper use of the various conventions used in the ICD-10-CM code books.	MBSC #3	1
Demonstrate proper use of the various conventions used in the HCPCS and CPT coding systems.	MBSC #4	1

ARB105 - Elementary Arabic I

Overview

Course Description
Designed for students as an introduction to Arabic Script and letter pronunciation, basic conversation skills and gradual building of reading, writing, and listening skills at a beginning level. Aspects of Arabic culture/history will be introduced.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Identify Arabic letters in all their forms.
2. Demonstrate correct pronunciation of letters and words.
3. Develop initial reading, writing and speaking skills.
4. Build initial vocabulary and simple grammatical structures.
5. Recognize cultural elements for different Arab countries.

ARB106 - Elementary Arabic II

Overview

Course Description
A continuation of ARB 105. This course will help students to develop basic skills in aural comprehension, speaking, reading and writing. Basic grammatical concepts will be reviewed and more complex grammar and sentence structures will be presented. Students will be introduced to the cultures in Arabic-speaking countries through a variety of activities.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
ARB105 Elementary Arabic I

Learning Objectives
Learning Objectives

- Read Arabic texts on familiar topics and understand the main ideas
- Develop vocabulary by using Arabic dictionary and identifying meaning of new words from context
- Use past, present, and future verb tenses in writing and speaking
- Ask and answer questions on everyday topics
- Carry on conversations on a variety of topics
- Write basic paragraph using correct grammar and sentence structure
- Identify some of the differences between formal and informal Arabic
- Identify differences among Arabic cultures
- Identify key aspects of Arabic culture connected to everyday life

ART101 - Introduction to Art

Overview
Course Description
Surveys painting, sculpture, architecture and other related art forms of western culture with consideration of the aesthetic, historical, and technical significance of major artistic achievements.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
0

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The ability to understand and use a vocabulary of new terms (and new meanings of familiar terms).		
The ability to understand the advantages and disadvantages of various art media and techniques.		
The ability to recognize the distinctions between various modes of artistic expression.		
The ability to formally analyze a work of art by referring to the tools of art (i.e., the design elements and principles).		
The ability to verbalize an aesthetic judgment about a work of art, at a level greater than personal opinion, based on an understanding of the myriad motivations that cause a work to be created.		
The ability to identify a number of significant art works (approximately 100) by one or more of the following: a) the artist; b) name of work; c) stylistic reference or period.		
The ability to recognize artistic styles and concepts when they appear in the world around them.		

ART102 - Fund of Drawing and Painting

Overview

Course Description

This course is divided into three basic areas. The first is the use of line and the development of form and balance. The second explores the use of shape, value, and space. The third relates to color. Through research and practice, the student gains a better understanding of design.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The development of hand skills involved in creating imagery through studio work.		
An understanding of the elements of design and pictorial structure through readings, studio work, and critiques.		
An understanding of basic terminology through research and discussion.		

ART107 - Digital Design

Overview

Course Description

This is a foundational course in computer graphics and digital arts that will provide students with a strong basis for any field that utilizes a computer to produce artistic work, including animation, computer game and simulation development, web development, and graphic design. Emphasis will be placed on gaining the ability to effectively utilize the Principles and Elements of Visual Design when creating projects. The students will have the opportunity to build their portfilio by designing professional, finished imagery using Adobe Photoshop. Prior knowledge in Photoshop is not necessary, though students entering this course need to have a basic understanding of computers, including how to save and organize files, how to properly use a mouse, and how to use word processing applications.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Understand the underlying principles of digital imaging, and use those concepts to manipulate and merge images into visually compelling photographic composites.		
Utilize best practices in digital image creation and manipulation, including proper non-destructive editing techniques.		
Apply the principles and elements of design to create visually successful 2D images and exciting graphical elements used to effectively communicate information.		
Create raster-based artwork that conveys volume through highlights, shading and shadows.		
Develop graphical elements that adhere to various specifications, including display on the World Wide Web, NTSC Television, High-Definition Television, Film, DVD, and Print.		

ART108 - Two Dimensional Design

Overview

Course Description

Each student will gain a greater awareness and understanding of the Elements and Principles of Visual Design. This course introduces students to an in-depth exploration of the elements of design; line, shape, pattern and texture, illusion of space, illusion of motion, and value and the organizing principles of design: unity, emplasis, focal point, scale, proportion, balance, and rhythm. Projects emphasize creativity, conceptualization, problem-solving, expression, research techniques, and presentation through the creation of works in various media covering the major components of two-dimensional design.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Understand and utilize the Elements and Principles of Visual Design through the creation of design projects that demonstrate independent solutions and professional presentations.	Think critically
2. Demonstrate proficiency using all the materials, techniques, and tools utilized in the creation of design projects.	N/A
3. Understand the evolution of creative designs by utilizing visual art references as resource materials for developing design solutions.	Apply information literacy skills
4. Analyze and evaluate projects by using art and design vocabulary through critiques and oral presentations about the student's own work and the work of their classmates.	Communicate effectively
5. Demonstrate an appreciation and understanding of creative expression through individual involvement with media and ideas.	Think critically
6. Examine the relationship of nature and the human experience in art.	Analyze human diversity

ART109 - Motion Graphics

Overview

Course Description

This course examines principles, tools, and techniques utilized in the design of motion graphics. Discussions focus on creating animated shapes, imagery, video, and text, all of which form the basis of motion graphics projects. Emphasis is also placed on creating dynamic and visually interesting moving pieces, including logo animations, kinetic typography,and title sequences, through the use of Adobe After Effects. Students develop finished, rendered works capable of delivery on CD, DVD, Broadcast, and the Worldw Wide Web. Although not necessary, knowledge of Adobe Photoshop may be beneficial to a student enrolling in this course.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

ART110 - Drawing I

Overview

Course Description

This foundation course provides instruction in the basic concepts and techniques of drawing through the examination seeing and understanding the fundamentals of structure, composition, form, shape, space, and value. Course content primarily focuses on developing perceptual skills for observing and drawing the illusion of the natural, three-dimensional world on a two-dimensional world surface. Drawing subject matter includes studies of nature, still-life, the human figure, and perspective. Various media are used including graphite and charcoal.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Experiment with and develop mastery of various graphic media and techniques.	N/A
2. Demonstrate through various drawing techniques perceptual observation skills.	N/A
3. Draw the illusion of the natural, three- dimensional world on a two-dimensional surface.	N/A
4. Analyze drawings by applying the vocabulary of the arts through critiques, oral presentations and discussions regarding the student's own work and the work of their classmates.	Communicate effectively
5. Develop personal images, ideas, and expressions that are rooted in a historical context.	Think critically
6. Utilize the Elements of Design through theory and practice.	Think critically

ART111 - Color Theory

Overview

Course Description
This course will explore the additive and subtractive color theories and their practical applications across artistic disciplines. Color-aid papers, mixed media collage, pigment as well as digital media oral presentations will serve as the basic media used in this course. Some of the topics covered will be an in-depth study of the basic properties of color, the psychological and expressive qualities of color and the symbolic and cultural content of color. This is a studio art course that will be project based.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Explore additive and subtractive color theories.	Think critically
2. Learn color theory principles and techniques utilized in all aspects of color theory exploration projects.	Think critically
3. Understand the color wheel, color systems, color types and color schemes.	Think critically
4. Understand the psychological, symbolic, expressive qualities and cultural content of color.	Apply information literacy skills Analyze human diversity
5. Analyze and evaluate projects by using color theory vocabulary through critiques and oral presentations about the student's own work and the work of their classmates.	Communicate effectively
6. Communicate issues of critical thinking skills through the creation of color theory projects.	Think critically
7. Understand the use of color across artistic disciplines.	Think critically

ART115 - Painting I

Overview

Course Description

Painting I is a foundation course that includes basic instruction in form, color, value, composition, and historical material. The medium is acrylic paint. Painting I focuses on perceptual and conceptual development with regard to visual problem solving through representational and abstract painting techniques. The emphasis will be on paintings that explore the interpretation of various subjects. Painting I students are encouraged to produce a series of painting that include personal expression.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Develop images, both figurative and abstract, that can be expressed through painting.	N/A
2. Experiment with a variety of materials and techniques common to painting.	N/A
3. Study and explore the elements of color from a theoretical and participatory standpoint.	Think Critically
4. Create paintings that are a reflection of personal expressions and give evidence of mastery of growth in skills.	N/A
5. Develop personal images, ideas and expressions that are rooted in the historical context of painting and visual imagery.	Think critically
6. Analyze and evaluate painting by using art and design vocabulary through critiques and oral presentations about the student's own work and the work of their classmates.	Communicate effectively
7. Develop an awareness of major traditions and contemporary movements related to painting.	Think critically

ART118 - 2D Game & Simulation Graphics

Overview

Course Description

This course teaches students techniques for creating two-dimensional, pixel-based and vector graphics to be used in interactive games and simulations. This course focuses on both static and animated sprites to be incorporated into games and simulations, as well as techniques for computer-assisted and scripted animation. Playable 2D games will be developed from inception to completion within Adobe Flash. This course is paired with CIS 118-Games and Simulation Programming Fundamentals as a learning community.

Total Credits

Total Credit Hours:

3.5

Billing Hours

Billing Hours Min:

3.5

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ART107 Digital Design

Corequisites

CIS118 Game & Simulation Program Fund

Advisement Comments

Taken with CIS118

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Create pixel-based and vector artwork to be used as game sprites and assets		
Develop both static and animated sprites for computer games.		
Animate artwork position and other properties using computer-assisted and scripted animation within 2D game engines.		
Work with game programmers to determine the best means of creating content and to provide efficient, needed 2D artistic assets.		
Produce a 2D game from inception to completion		

ART118L - 2D Game & Sim Graphics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

ART119 - Digital Photography

Overview

Course Description
This course will serve as an exploration of the fundamental principles, techniques and application of digital-camera based image creation. Students will learn skills necessary to capture digital images by use of proper exposure settings for aperture, shutter speed, metering, color and light balance, composition, lighting, manual techniques, and editing. The course will include lecture, demonstration, assignments (in and out of the classroom), readings, critique, and critical issues in photography.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Understand the basic and advanced functionality of a DSLR camera.		
Demonstrate knowledge of elements of design and principles of organization in order to effectively create visually pleasing photographic compositions.		
Apply basic and advanced techniques in various lighting conditions to achieve desired exposure on a digital photograph.		
Analyze historic and current trends in photography in order to produce compelling visual images.		
Utilize industry standard software to effectively edit and organize digital photography libraries.		
Critique photographic images in order to improve the students' digital image production skillset.		
Create a portfolio of digital photography to present in a contemporary format.		

ART125 - Jewelry and Metalsmithing I

Overview

Course Description

Acquaints student with basic jewelry and metalsmithing techniques. Special emphasis placed on a variety of methods of construction. Jewlery considered in a fine arts context in terms of form, color and content. Assigned readings, studio projects and weekly critiques will help students develop a better understanding of this area of concentration.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The ability to utilize various jewelry and metalsmithing techniques.		
The ability to explore and utilize the elements of visual design.		
The ability to critique designs, with emphasis on content and meaning.		
The ability to understand the possibilities and limitations of the craft.		

ART128 - Comp-Aid Logo&Advertis Design

Overview

Course Description

An introduction to the software being utilized in the current Computer-Generated Design industries, the course focuses on the generation of vector-based graphical elements common in computer-generated logo designs and advertisements. The students will build their portfolios by utilizing Adobe Illustrator to design CG visuals for use in various projects, including, but not limited to, print and web advertisements, motion graphics, and multimedia enhanced designs.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

ART130 - Ceramics I

Overview
Course Description
Provides instruction that will enable the student to gain a progressive understanding of form and to develop skills in this craft. Beginning throwing and hand-building projects will include the use of stoneware and porcelain clay. Projects will include the creation of functional and non-functional ware.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
0

Lecture Hours
Lecture Hours (per week):
3

ART132 - Prin of 3D Modeling & Texture

Overview
Course Description
This course examines three-dimensional tools and techniques used to create photorealistic, illustrative, and abstract digital imagery. Students will learn the concepts behind polygonal modeling and texturing to create various computer generated objects, including, but not limited to, products, vehicles, organic shapes, and structures. Student develop finished, polished computer-generated imagery using industry standard software and the exploration of modeling, texturing, lighting, and rendering.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

ART135 - Three Dimensional Design

Overview

Course Description
This course considers the Elements of Design and the Principles of Three-dimensional Design. Some of the goals include helping the student to become aware of the use and development of Three-dimensional design through the utilization of basic materials, technique, and tools. An understanding of the major traditions and contemporary movements in sculptural design will also be explored. Each student will gain a clearer understanding and greater appreciation of form through individual involvement in creative projects.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

ART145 - The Art of Illustration

Overview

Course Description
Students develop their unique "visual language" through projects dealing with areas in the illustation market. Students study illustrators, illustration as an art form, and trends in the field. Students gain an overview of the variety of options in the field and experience in producing actual illustrations in a variety of media and contexts from initial idea to finished product.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ART110 Drawing I

Advisement Comments
Without the proper knowledge of Drawing I, ART 110, students in some cases lack the proper fundamentals to fully grasp and execute all the concepts offered in Illustration.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Understand the field of illustration from both a historical and business perspective.	Think critically Apply information literacy skills
2. Develop visual language through the production of projects that mirror the actual types of work carried out by practicing illustrators in a variety of media.	N/A
3. Think conceptually, interpret and respond to text with original images, work with metaphor, symbolism and visual association.	Think critically
4. Communicate clearly and effectively, with immediacy.	Communicate effectively
5. Understand the process of illustration, from thumbnail sketch to finished art, its relation to graphic design and typography.	Think critically
6. Research an assignment and gather picture references.	Apply information literacy skills
7. Use their knowledge of illustration's past and present, the illustrators, genres, their media and tools to produce effective illustrations.	Apply information literacy skills
8. Analyze and evaluate illustrations by using art and design vocabulary through critiques and oral presentations about a student's own work and the work of their classmates.	Communicate effectively

ART150 - Fashion Design Concepts/Illust

Overview

Course Description

Students address fashion design concerns primarily through the use of two-dimensional exercises that are utilized in the fashion industry. Important topics that the course reviews include fashion illustrating, textile rendering textiles (flat design drawings), and collection development.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ART108 Two Dimensional Design, ART112

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Understand the fashion figure in relation to the standard human figure.		
Develop a personal style through croquis development.		
Identify a wide range of illustrators in the field of fashion.		
Illustrate fashions with a variety of media.		
Render textiles as two-dimensional interpretations and how they appear draped as three-dimensional forms.		
Design an extensive collection for various seasons and groups.		
Understand basic clothing construction guidelines.		

ART153 - Costume Construction

Overview

Course Description

This course will introduce the basic fundamentals in fabric draping and pattern making with a focus on the creative aspects used in theatrical, professional and personalized costume concepts. The exploration of draping techniques, specific sizing instruction of patterns, and emphasis on various textiles are taught and discussed in-depth. Students will use mathematical processes to achieve perfect fit and proportions. Bodice, torso, pant, skirt, sleeves as well as clothing details are created in muslin and pattern paper to ensure proper conception and execution of the costume and accessories. Draping and fitting muslin will ensure proper dressform to create classic garments, including the two basic bodices, princess line garments, shifts, dresses, shirts, and skirts. A component of this class will also focus on the elements of accessory to enhance and support the costume designed. A brief exploration into jewelry and product accessory will lend to an extension of creativity to allow the garment and character to come to life simultaneously. The use of both historical and modern references in pop culture and beyond will serve as a reference point to all costumes constructed.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Employ an in-depth knowledge of the professional aspects of fashion design.		1
Demonstrate a working knowledge of composition and how to create consistent quality.	2	1,5
Illustrate the application of media to inform viewers and designers alike of the potential of contemporary costume construction.	1	1,5
Investigate onsite constructions and studio practice of leading industry professionals for valuable insight into the many modern artistic career paths.		1,5
Produce a portfolio of work, built through course assignments, of topics related to the course.		1,5

ART181 - Adv 3D Modeling & Texturing

Overview

Course Description

Building upon the foundational principles of 3D modeling and texturing to create more complex 3D models, including creatures and characters, this course discusses 3D sculpting and texture painting as means of augmenting traditional modeling and texturing methods. Topology and normal mapping are explored, with an emphasis on using efficient 3D models in game environments. Various 3D animation concepts are also discussed as a means to help bring these 3D models to life. Games projects using the visual assets created will be produced in partnership with programming students.

Total Credits

Total Credit Hours:

3.5

Billing Hours

Billing Hours Min:

3.5

Lecture Hours

Lecture Hours (per week):

3

Lab Hours

Lab Hours (per week):

1.5

Requirements

Prerequisites

ART132 Prin of 3D Modeling & Texture

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Utilize industry-standard 3D modeling and sculpting software to create complex 3D Computer-Generated imagery.		
Create effective UV layouts for use on detailed 3D models.		
Use 2D image manipulation software and 3D paint software to generate high quality textures.		
Provide the illusion of detail on a model by creating Normal Maps from high-polygon models to be applied to low-polygon models.		
Create basic skeletal structures for animation purposes.		
Incorporate 3D models and animations into game projects.		

ART181L - 3D Game and Sim. Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:

0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
1.5

ART190 - Dance

Overview

Course Description
This course will develop an appreciation for dance as an art form. A variety of dance forms are taught, with emphasis placed on reinforcement of technical skill, kinesthetic knowledge of dance techniques, strengthening of the individual's creative processes, and a focus on dance as a vehicle of expression and communication. Enrollment in this course requires participation in the production schedule for a dance performance with the ensemble. This course is taught on Cedar Crest College's campus by their faculty.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lab Hours

Lab Hours (per week):
8

Requirements

Advisement Comments
This course is taught on Cedar Crest College's campus by their faculty. The student will need to provide their own transportation to/from Cedar Crest's campus for rehearsals and concerts.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. To improve knowledge and execution of technical skills	N/A
2. To apply kinesthetic knowledge and principles in the understanding and performance of technique	N/A
3. To broaden the understanding of dance styles, their relationship to each other and other dance forms	N/A
4. To focus on dance as an important vehicle for expression and communication	2. Communicate effectively
5. To stimulate individual creativity	N/A

ART209 - Comp Game & Simulation Art

Overview

Course Description
This is the capstone course for the Computer Gaming and Simulation Program-Digital Arts track. In this course, students will utilize the skills that they have developed in previous courses to create three-dimensional game/simulation projects in a team-based environment. Students will participate in the design, production, and project managment process while utilizing their digital arts skills to develop a computer game. This class is taught as a learning community with CIS 209.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ART118 2D Game & Simulation Graphics, ART247 Intro to Animation, CIS180 Introduction to Project Mgmt

Corequisites
ART252 Comp Gen Dynamic Simulations

Advisement Comments
Course is being reinstated to allow students seeking graduation in specific degrees to complete their programming. Once the identified remaining student population has completed this course another review will be conducted to determine course status.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Apply the techniques and processes learned in previous Game and Simulation Development courses to create fully completed, professional game/simulation projects.	
2. Act in the role of an artist for a game or simulation project created in a three-dimensional game engine.	
3. Create a computer game/simulation project by working effectively using a team-based approach.	Participate Cooperatively within a team.
4. Develop project deliverables in accordance with industry standards.	

ART210 - Drawing II

Overview

Course Description
This course expands on the basic concepts presented in Drawing I. Students will be introduced to more complex problems that focus on expressive development. Students are motivated to create drawings that depict a process-oriented construction of a drawing that requires more than prescribed results for the solution of the drawing problem. Students explore and investigate contemporary approaches to drawing.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ART110 Drawing I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Continue mastery of various graphic media and techniques.	N/A
2. Utilize the Elements of Design through theory and practice.	Think critically
3. Develop personal images, ideas, and expressions that are rooted in a historical context.	Apply information literacy skills
4. Analyze and evaluate drawings by using art and design vocabulary through critiques and oral presentations about a student's own work and the work of their classmates.	Communicate effectively

ART212 - American Art

Overview

Course Description
An in-depth study of the art of our country commencing with the 17th century and concluding with the present. Emphasis on examples which can be viewed and studied locally.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ART101 Introduction to Art

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The ability to use and understand a vocabulary of new terms (or new applications of familiar terms) that relate specifically to art in America.		
The ability to understand how artistic expression developed in the United States since the early seventeenth century and how the events of social/cultural climates affected that development.		
The ability to identify a number of significant works or styles of expression reviewed during the semester.		
The ability to recognize various artistic styles and concepts as they occur in the world around us.		

ART215 - Painting II

Overview

Course Description

ART 215 further expands the foundation of the Painting I course to introduce a broad variety of technical approaches, format sizes, and subject matter, and to show the many possibilities that exist in the painting medium. Students will enlarge their understanding of painting as a medium, explore various aspects of color theory, and study and integrate a variety of compositional devices to achieve stronger impact. Students will gain an understanding of the interrelationship between hue, value, and saturation and explore how they are manipulated to achieve specific effects and continue their self-expressive development.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ART115 Painting I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Understand acrylic and/or oil painting's range as a medium.	N/A
2. Understand and apply various aspects of color theory.	Think critically
3. Integrate a variety of compositional devices to achieve stronger impact.	N/A
4. Understand the interrelationship between hue, value and saturation and how these are manipulated to achieve specific effects.	N/A
5. Express themselves creatively through the medium of painting.	N/A
6. Analyze and evaluate paintings by using art and design vocabulary through critiques and oral presentations about the student's own work and the work of their classmates.	Communicate effectively
7. Develop personal images, ideas, and expressions that are rooted in a historical context.	Think critically Apply information literacy skills

ART219 - Digital Photography II

Overview

Course Description

In this course, students will build upon photographic practices learned in Digital Photography I. Knowledge of historical/contemporary masters of photography as well as current photography industry standards will be expanded upon. Student will further explore their utilization of RAW files & be introduced to the use of flash. They will also learn advanced retouching and composite post-production skills with industry-standard software. Students will produce a portfolio of images from their semester's work.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ART119 Digital Photography

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Incorporate a more in-depth knowledge of photography history into their images	PO#3
2. Demonstrate a working knowledge of RAW files	PO# 5
3. Display understanding and utilize a hot shoe mounted camera flash on and off camera	PO# 4
4. Retouch and manipulate photos using industry-standard software	PO# 5
5. Produce a portfolio of work, built through course assignments, of topics related to the course	PO# 6

ART225 - Jewelry and Metalsmithing II

Overview

Course Description

Builds on the techniques, concepts and methods of construction presented in the first level of this craft. The elements of line, form, texture and color will be redefined and pursued in greater depth. Emphasis given to content and meaning. A review of the previous readings, studio projects and critiques will be used to promote greater understanding. Assignments made on an individual basis. The processes include inlay, repousse, forging, lamination, oxidation, enameling, centrifuge, setting and fabrication. Personal expression and the development of excellence in craftsmanship are of paramount importance.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ART125 Jewelry and Metalsmithing I

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The ability to explore and utilize the elements of visual design.		
The ability to critique designs, with emphasis on content and meaning.		
The ability to utilize existing jewelry and metalsmithing processes.		
The ability to refine personal design craftsmanship.		

ART226 - Adv Multiimedia Design

Overview

Course Description

Students will utilize the tools presented in previous courses to develop an interactive, educational multi- media product. The students will work in teams to develop a computer-based instructional product for a real-world client.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

ART226L - Adv Multi & Des Conc Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1.5

ART229 - Commercial Studio Photog.

Overview
Course Description
In this course students will utilize commercial studio lighting techniques for product, food and portraits images. Students will learn and demonstrate uses of the technical aspects of studio lighting, techniques of commercial photography for advertising, and lighting equipment. Students will learn to capture commercial images in both a studio and on-location environments. Lighting modifiers such as soft boxes, reflectors and umbrellas will be utilized. Student will produce finished conceptual advertising images for critique, projects, and portfolio.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
ART119 Digital Photography

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGE WIDE STUDENT COMPETENCY
1. Create images utilizing studio lighting techniques	PO #4
2. Create images utilizing proper use of lighting equipment and modifiers	PO #4
3. Produce images utilizing practices of commercial image retouching techniques with industry standard hardware and software	PO #5
4. Produce a portfolio of work, built through course assignments, of topics related to course	PO #6

ART230 - Ceramics II

Overview

Course Description

Follows the basic areas of exploration included in the Ceramics I course. Hand-building and wheel-thrown projects will be created. Emphasis on improving the basic skills and learning to be more sensitive to form and shape.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

ART235 - Sculpture

Overview

Course Description

ART 235 provides opportunities for students to gain a better understanding of the processes and concepts presented in ART 135. Students will be encouraged to develop systems of working with armatures and using additive and subtractive methods. This course introduces the various tools used to sculpt and emphasizes understanding the major traditions and contemporary movements in sculpture and design.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

ART242 - Desktop Publishing

Overview

Course Description

This course immerses students in the theories and practice of desktop publishing using industry standard software. Students will incorporate raster and vector artwork along with typography to produce professional layouts for newspapers, magazines, books, posters, brochures and electronic media. This course will be used for produce portfolio work that students can use when seeking employment or admissions to four-year institutions.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ART107 Digital Design, ART128 Comp-Aid Logo&Advertis Design

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Understand the foundational concepts and principles of desktop publishing		
Utilize effective two dimensional design and color theory principles to design effective layouts combining text and visual imagery.		
Use the principles of Typography to create and implement effective typefaces and fonts for use in layouts visual designs.		
Create design projects that adhere to the various standards of print and screen.		
Produce professional quality layouts ready for publication and portfolios		

ART247 - Intro to Animation

Overview

Course Description

This course examines the principles of animation in order to give students a basis for creating interesting, entertaining, and natural-looking movement. Students will learn foundational animation principles, taught through 2D animation techniques, and later reinforced using 3D computer animation concepts. In addition to using time-tested tools of traditional animation, students will utilize modern, advanced animation features of leading professional animation software, including Autodesk Maya.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

ART248 - Web-Based Interactv Animation

Overview

Course Description
This course provides the students with the knowledge and practical experience needed to create effective and efficient interactive animations and websites from concept to development using Adobe Flash. Instruction in vector, raster, and animated graphical elements, as well as the scripting needed to make these elements interactive, will be emphasized. Students will build their portfolios by utilizing Adobe Flash to design vector-based, animated, interactive projects. Students will need prior programming or scripting experience to be successful in this course. Addititionally, knowledge in raster image creation and manipulation via Adobe Photoshop, though not necessary, may be beneficial to students.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

ART248L - Web Based Multimedia I

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

ART251 - Character Rigging & Animation

Overview

Course Description
In this course, students will develop character animations using the Autodesk Maya professional 3D animation software package. Emphasis is placed on developing effective skeletal structures, character rigging, and keyframe-driven animation, utilizing Inverse and Forward Kinematics. Students will learn how to create natural, believable motions through understanding and mimicking weight distribution and other natural forces, which act upon body motion. Bipedal, Quadrupedal, and other forms of animal locomotion will be explored. Though ot is not necessary, taking ART 181-Advanced 3D Modeling and Texturing may be beneficial for students taking this course.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ART247 Intro to Animation

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Develop compelling character animation, which accurately mimics natural motion.		
Design functional character rigs with effective controls.		
Develop sophisticated and convincing bipedal, quadrupedal, and other animal animations utilizing 3D animation tools.		
Utilize 3D animation tools to add secondary movements to character animations.		
Understand how natural physical forces affect motion, and why a body moves how it does.		
Apply the Principles of Animation to 3D character animations.		

ART252 - Comp Gen Dynamic Simulations

Overview

Course Description
This course explores the creation of physics-based animations for use in the simulation, gaming, and entertainment industries, through the use of industry-standard computer animation and 3D gaming software. The principles, tools, and techniques used in creating rigid-body dynamics, soft-body dynamics, particle physics, and other dynamic simulations will be discussed. Students will produce completed animations and interactive projects to strengthen their skills and their portfolios.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ART132 Prin of 3D Modeling & Texture, CIS132 Prin of 3D Modeling & Texture

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Understand the differences, similarities, and relationships between rigid-body, soft-body, and particle dynamics.		
Understand the differences, similarities, and relationships between rigid-body, soft-body, and particle dynamics.		
Mix key-frame animations with physics-based animations.		
Create interactive animations that also utilize dynamic components.		

ART258 - Multimedia Practicum

Overview

Course Description

This course serves as an optional program capstone for the Computer-Generated Digital Art and Animation degree. Students must submit a proposal for a project that they intend to complete for the duration of the course in order to be approved by the Practicum instrucor. Students may also choose to seek an internship to fulfill the practicum. Specific requirements of the project or the internship will be outlined, if a student is accepted into the course. The course is intended to allow students to produce completed, polished work for inclusion in a portfolio or demo reel, to gain real-world expericence via an internship within the digital arts field, or to otherwise prepare for future employment. Regardless of whether the practicum is a project or internship, students will need to meet strict deadlines and produce appropriate work for those deadlines, in order to simulate real-world work experience. Since different projects and internship opportunites have different skill requirements, the instructor of the Practicum will determine students' eligibility on a case-by-case basis.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Advisement Comments

Instructor permission required

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Research and propose a plan for a compelling project.		
Apply previously acquired skills to the completion of a complex, multifaceted project.		
Adhere to a schedule and complete assigned tasks within deadline specifications.		
Design or substantially enhance a professional portfolio and/or demo reel.		

ART260 - Independent Study

Overview

Course Description

Reading and/or experimentation for individual or group study on topics selected in consultation with faculty member. Special attention given to the particular abilities and interests of students, with individual guidance for advanced studies. Students may choose research on selected problems, supervised field studies, or reading programs, among other alternatives.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Requirements

Advisement Comments

Introductory course in the area and written consent of cooperating faculty member

Learning Objectives

Learning Objectives

Based on Independent Study Action Plan

ART260H - Indep Stdy-Painting III

Overview

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours
Lecture Hours (per week):
3

ART260L - Adv Fashion Design Concepts

Overview

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

ART265 - Professional Practices Capstone in Fine Arts

Overview
Course Description
This capstone course offers an intensive studio experience for personal development and artistic growth, culminating in a final semester-end exhibition. The focus on both group critiques and detailed self-analysis of personal artwork will strengthen and build valuable character that is necessary for continued success. This class will also provide an in-depth building of students transfer and/or personal portfolio in preparation for the next stage chosen. Collectively these elements will cultivate an aesthetic awareness of creative issues to further the knowledge and understanding of the artistic career path. Students gain knowledge of professional practices by visiting galleries, museums, and artists' studios; speaking with artists, art dealers, art critics, and museum staff; and researching and writing about these experiences.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Lab Hours
Lab Hours (per week):
0

Other Hours
Other Total Hours:
0

ART297 - Special Topics

Overview

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
2.5

Lab Hours
Lab Hours (per week):
1.5

ASA105 - Small Unmanned Aircraft

Overview
Course Description
This course will examine the required knowledge areas to be prepared to take the Federal Aviation Administration (FAA) knowledge test for the issuance of a Remote Pilot-Small Unmanned Aircraft System airman certificate, and provide hands-on skill development in flying a drone. Study includes the following topics; airspace classification, operating requirements, flight restrictions, aviation weather and effects on small unmanned aircraft performance, aircraft loading, emergency procedures, crew resource management, and airport operations. Students will have hands-on experience flying a drone. Upon successful completion of this course, the student will possess the knowledge to pass the FAA written exam for the Remote Pilot-Small Unmanned Aircraft System airman certificate.

Total Credits
Total Credit Hours:
2

Billing Hours
Billing Hours Min:
2

Lecture Hours
Lecture Hours (per week):
2

Learning Objectives
Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate skills in flying a drone by successfully completing identified maneuvers.	N/A
2. Identify FAA rules regarding flight restrictions and operating requirements of a drone.	N/A
3. Practice crew resource management techniques.	Evaluate ethical aspects of decision making. Communicate effectively. Analyze human diversity. Participate cooperatively within a team.
4. Identify aeronautical characteristics and restrictions of a drone.	Apply scientific reasoning. Apply quantitative reasoning.

ASA111 - Private Pilot-Flight Theory

Overview

Course Description
This couirse is designed to provide the appropriate knowledge, skills, and aeronautical decision making tools in compliance with the Federal Aviation Administration (FAA) approved Part 141 training curriculum for the Private Pilot Certificate. Study of the following topics within the FAA approved ground/flight school syllabus includes introductory aerodynamics, meteorology, federal regulations, air traffic control, national airspace system, navigation for Visual Flight Rules flight, use of single-pilot resource management tools, introduction to aircraft systems and aircraft performance. Instruction in a flight training device is also available. Upon successful completion of this course, the student will possess the knowledge to pass the FAA written exam for the Private pilot certificate, airplane single engine land.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
In accordance with Appendix B of FAR Part 141, at least 35 hours of ground training will be completed for the Private pilot aeronautical knowledge requirements.

Requires: Student Pilot certificate, Second Class FAA medial (First Class highly recommended), U.S. citizen or TSA approval to initiate flight training.

Learning Objectives

Learning Objectives
The course objective is for the student to acquire the aeronautical knowledge necessary to successfully pass the FAA aeronautical knowledge exam associated with the Private pilot certificate. The course objectives are expressed in each of the three different Stages of ground training. In Stage I, the student is introduced to pilot training, aviation opportunities, and human factors in aviation and will become familiar with airplane systems, aerodynamic principles, and the flight environment. The student will also obtain a basic knowledge of safety of flight, airports, aeronautical charts, and airspace and air traffic control services. The student will also learn radio procedures and common sources of flight information. In Stage II, the student becomes familiar with weather theory, typical weather patterns, and aviation weather hazards. The student will learn how to interpret weather reports, forecasts and graphic charts as well as Federal Aviation Regulations and how they apply to Private pilot operations. In Stage III, the student learns how to predict airplane performance and control the weight and balance condition of the airplane. The student will be introduced to different types of navigation techniques and equipment. This includes the proper use of aeronautical charts, plotters, flight computers and flight publications to plan cross country flights. The student will learn how to conduct comprehensive preflight planning and gain insight into the factors affecting aeronautical decision making.

ASA112 - Private Pilot Practical

Overview

Course Description
This course is designed to provide the practical flight training necessary to develop the aeronautical skill and experience necessary to meet the requirements for a private pilot certificate with an airplane category rating and single-engine land class rating. The training will be completed using an FAA approved Part 141 flight training curriculum. The one lecture hour of practical application may be integrated into the ASA 111 flight theory course as appropriate at the discretion of the course instructor. The practical course instructor will facilitate the resolution of any flight training issues that may arise. Passing the Stage flight checks, end of course flight check, and the FAA flight practical are requirements for this course. Students will receive a final grade for the course following the completion of the FAA check ride.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours
Lecture Hours (per week):
1

Lab Hours
Lab Hours (per week):
1

Other Hours
Other Total Hours:
5

ASA112L - Private Pilot Practical Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1

ASA117 - Aviation Meteorology

Overview
Course Description
As a foundation, provides insight into meteorology and its effect on aviation operations. The course examines the structure of the atomsphere, weather patterns and their impact on flight operations to include thunderstorms, turbulence, wind shear, and icing. Sources of weather information and analysis of weather reports to facilitate flight planning will also be examined.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Describe the basic structure of the atmosphere including the significance of pressure systems, circulation patterns, jet streams, and temperature lapse rates to gain an understanding of weather patterns.	
2. Understand atmospheric stability, vertical motion, and moisture in the development of cloud types and precipitation.	
3. Interpret weather reporting data including METARS, TAFS, Surface Analysis chats, Prognostic charts, Winds Aloft charts, Weather Depiction chart, Radar Summary chart for flight planning and in flight decision making.	
4. Understand weather related hazards including thunderstorms, windshear, turbulence, icing and the use of Pilot Reports, SIGMETS, and AIRMETS as these relate to the conduct of safe flight operations.	
5. Learn how to obtain thorough weather briefings through all available weather resources during preflight and in flight operations.	

ASA121 - Instrument Flight Theory

Overview

Course Description

This course is designed to provide the appropriate knowledge, skills, and aeronautical decision making tools in compliance with the Federal Aviation Administration (FAA) approved Part 141 training curriculum for the Instrument Airplane rating. Study of the following topics within the FAA approved ground/flight school syllabus includes human factors; flight instruments; attitude instrument flying; instrument regulations; air traffic control system; departure, enroute, arrival, holding and approach procedures; weather inforamtion; cross-coutry planning and single-pilot resource management tools. Instruction is a flight training device is also available. Upon successful completion of this course, the student will possess the aeronautical knowledge to pass FAA written exam for the Instrument Airplane rating.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ASA111 Private Pilot-Flight Theory

Advisement Comments

Requires second class medical and U.S. citizenship or TSA approval to initiate flight training.

In accordance with Appendix C of FAR Part 141, at least 30 hours of ground training will be completed for the Instrument Airplane aeronautical knowledge requirements.

Learning Objectives

Learning Objectives

The course objective is for the student to acquire the aeronautical knowledge necessary to successfully pass the FAA aeronautical knowledge exam associated with the Instrument Airplane rating. The course objectives are expressed in each of the three different Stages of ground training. In Stage I, the student learns about the principles of instrument flight including the operation, use, and limitations of flight instruments and instrument navigation systems. The student learns about how the ATC system functions and is introduced to single pilot resource management and human factors for instrument flight. In Stage two, the student learns how to interpret instrument charts and explores procedures for performing IFR departure, enroute, arrival and approach operations. In Stage 3, the student learns to analyze weather information conditions and trends, explores IFR flight planning and emergency operations and develops a greater understanding of single pilot resource management.

ASA122 - Instrument Airplane Practical

Overview

Course Description

This course is designed to provide the practical flight training required for the completion of the airplane instrument rating utilizing an FAA Part 141 training curriculum. Additional hours are available in LCCC's Advanced Aviation Training Device. There are three Stage checks and an end of course stage check as part of the course curriculum. The one lecture hour of practical application may be integrated into the ASA 121 flight theory course as appropriate at the discretion of the course instructor. Th practical course instructor will facilitate the resolution of any flight training issues that may arise. Students are to attain the FAA airplane instrument rating at the completion of the course. Passing the Stage flight checks, end of course flight check, and the FAA flight practical are requirements for this course. Students will receive a final grade for the course following the completion of the FAA check ride.

Total Credits

Total Credit Hours:

2

Billing Hours

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

1

Lab Hours

Lab Hours (per week):

1

Other Hours

Other Total Hours:

5

ASA122L - Instrument Practical Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):

1

ASA126 - Crew Resource Management

Overview

Course Description

The Crew Resource Managment (CRM) course is a study of the attitudes and skill sets that enable flight crews to effectively manage the complex flight environment. Teamwork, communication, leadership, situation awareness, workload and automation management, controlled flight into terrain awareness, and decision-making are among those vital skills to enhance the safety and effectiveness of a technically competent pilot crew. The evolution of CRM and the integration of CRM into flight crew training as well as the safety culture of an airline are examined. The proven effectiveness of CRM for managing threats and errors are viewed through the lens of the Line Operations Safety Audit. Consideration is given to the impact of diverse international cultures on the effectiveness of CRM.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
Requires Private Pilot Certificate or course instructor approval.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the importance of effective teamwork to enhance safe flight.		
Identify the goals and benefits of the Line Operations Safety Audit and the impact it has on reducing aircrew errors.		
Identify the benefits and challenges of effectively applying CRM principles in flight operations.		
Identify the impact of diverse cultures on the effectiveness of applying CRM principles in an aviation flight crew environment.		
Explore the impact and intersection of organizational culture and CRM relative to the impact on aviation operations.		

ASA127 - Aircraft Systems

Overview

Course Description
This course provides a detailed study of aircraft systems. Large/advanced aircraft systems study of electrical, hydraulic, pressurization, pneumatics, propellers, environmental, de-ice/anti-ice, power sources and normal/emergency operations.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify and describe the major components used in large aircraft hydraulic, electrical, pneumatic, fuel, and environmental systems.		
Interpret/explain basic system diagrams.		
Understand the basic operating principles of large aircraft systems.		
Recognize normal and abnormal system configurations and understand appropriate corrective actions.		
Develop a respect for the complexity of large aircraft systems resulting in the development of behaviors consistent with the professional pilot.		

ASA211 - Commercial Flight Theory

Overview

Course Description

This course is designed to provide the appropriate knowledge, skills, and aeronautical decision making tools in compliance with the Federal Aviation Administration (FAA) approved Part 141 training curriculum for the Commercial Pilot Certificate. Study of the following topics within the FAA approved ground/flight school syllabus includes knowledge of airports; airspace, flight information; meteorology, airplane performance, VFR cross country flight planning and navigation, aviation physiology, high performance powerplants, environmental and ice control systems, complex aircraft transition, advanced aerodynamics, predicting performance, controlling weight and balance, maximum performance takeoffs and landings, emergency procedures and single pilot resource management for single and multi-engine commercial pilot operations. Instruction in a flight training device is also available. Upon successful completion of this course, the student will possess the aeronautical knowledge to pass the FAA written exam for the Commercial Pilot Certificate.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ASA112 Private Pilot Practical, ASA122 Instrument Airplane Practical

Advisement Comments

Requires FAA second class medical certificate

Students should be made aware of the required flight lab fee associated with the corequisite ASA 212 flight course. Please see current catalog for flight lab fee information. Waiver of any prerequisite must be obtained from the full time staff aviation instructor.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Student will obtain the aeronautical knowledge required of a commercial pilot applicant.	Perform all phases of visual and instrument flight as pilot in command of a commercial flight to FAA standards. Collegewide competency of thinking critically.

ASA212 - Commercial Pilot Airplane I

Overview

Course Description

This course is designed to begin the practical flight training required for the successful attainment of the airplane Commercial pilot certificate utilizing an FAA approved Part 141 training curriculum. During the flight training the student increases proficiency in VFR cross-country procedures by planning and performing extended cross-country flight operations. the student also increases proficiency in performing night flight operations. There is one stage of flight training. The one lecture hour of practical application may be integrated into the ASA 211flight theory course as appropriate at the discretion of the course instructor. The practical course instructor will facilitate the resolution of any flight training issues that may arise.

Total Credits

Total Credit Hours:

2

Billing Hours ⓘ

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

1

Lab Hours

Lab Hours (per week):

1

Other Hours

Other Total Hours:

4

ASA212L - Comm Pilot Airplane I Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours ⓘ

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):

1

ASA214 - Commercial Airline Pilot II

Overview

Course Description

This course is designed to complete the practical flight training required for the successful attainment of the Commercial Pilot certificate utilizing an FAA approved Part 141 training curriculum. The student gains proficiency in operating a complex aircraft or a Technologically Advanced Aircraft (TAA) and includes learning the procedures to operate complex airplane systems, equipment malfunctions and failures. The TAA training includes operation of the Garmin G3X Touch, GTN 750 and GFC autopilot or similar TAA recognized equipment. The student performs maneuvers and procedures to attain the proficiency level required for an airplane Commercial Pilot certificate with an instrument rating. The students must attend the one-hour flight practical lecture class during the semester to learn the operational features of the Garmin G3X Touch, GTN 750 and GFC autopilot. Students are required to communicate weekly with the practical course instructor regarding their flight course progress and to facilitate the resolution of any issues that may arise during flight training.

Total Credits
Total Credit Hours:
2

Billing Hours
Billing Hours Min:
2

Lecture Hours
Lecture Hours (per week):
1

Lab Hours
Lab Hours (per week):
1

Other Hours
Other Total Hours:
6

ASA214L - Comm Pilot Airplane II Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1

ASA215 - Aerodynamics

Overview

Course Description
This course introduces the student to the dynamics of flight through investigation of airfoils and shapes as they relate to aircraft structures and their interaction with the atmosphere during flight. Analysis of the physics of flight, coefficient of lift, relationship of lift/drag, aerodynamic devices, interaction of airframe/airfoils with the atmosphere during flight, low/high speed aerodynamics, mach effects, area rule, wing sweep are discussed. Aircraft performance based on powerplant type and special flight conditions experienced by commercial pilots is evaluated.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT130 Industrial Mathematics

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the effects of aerodynamic forces with respect to lifting platforms.		
Describe the effects of various cross sections and planforms of airfoils on the ability to provide lift and/or aircraft control.		
Outline the general concepts of subsonic, transonic, and supersonic flight.		
Describe how stability and control are affected by changes in aerodynamic forces.		
Relate learned aerodynamic concepts to specific aspects of flying.		
Improve flying ability through the application of aerodynamic principles to aircraft operation.		
Describe aircraft performance requirements based on powerplant configuration**;** reciprocating, turboprop and jet turbine engines, and special flight conditions that may be experienced by commercial pilots.		

ASA217 - Aviation Laws and Regulations

Overview

Course Description
Designed to provide insight pertinent to federal governing bodies. Current local, federal and international laws which form the present structure of aviation law are studied.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ASA111 Private Pilot-Flight Theory

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Have an understanding of the development of aviation laws and their analogy to the Law of the Sea.		
Have an understanding of national sovereignty of the immediate airspace and outer space. The student should know the rights of the individual, the nation and the world of nations to air space and the constant conflicts as national political structures change.		
Know and be aware of the possible effects of world affairs on international air route structures, national liabilities, and conventions and understand the complexities of treaties as well as multi and bilateral agreements made between nations.		
Be able to list and describe the various agencies, both United States and international, which affect aviation laws and regulations.		
Have developed an appreciation for the effects of apparent isolated law decisions within the United States and between other nations on decisions which are affected by technological advances.		
Through problem resolution, be able to discuss viewpoints without emotion and in an orderly manner.		
When questioned, be able to analyze, challenge, and attempt to determine the basis for a particular aviation law or regulation, and to discuss its perceived advantages and disadvantages.		
Be able to consider the overall ramifications of the total air transportation system as it affects air space.		
Be able to discuss the relationship of national political structures on the international air route structure, and its effect on individual citizens, regional ethnic conflicts, libale treaties, and agreements.		
Be able to conduct library research, including the use of the law library.		

ASA219 - Air Carrier Operations

Overview

Course Description

Air Carrier Operations is a one hour per week lecture/discussion class period. Students will review and discuss in detail Federal Aviation Regulations contained in Part 119-Certification of Air Carriers and Commercial Operators.. Subject material of this course is intended to familiarize the entry level commercial pilot with the certification process, operations specifications, and the use of standard operating procedures used in part 135 and 121 flight operations. The required management personnel for both types of operations will also be explored. The regulatory requirements in the following areas will be examined: flight operations, aircraft and equipment, weather, flight crew member training and dispatching requirements.

Total Credits

Total Credit Hours:

2

Billing Hours

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

2

Requirements

Prerequisites

ASA122 Instrument Airplane Practical

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Define, compare and contrast the use of an Air Carrier Certificate, Operating Certificate, Operations Specifications and Standard Operating Procedures.	
2. Describe the types of management personnel required in Part 135 and 121 operations.	
3. Identify flight crewmembers requirements, flight time duty limitations, and crew member testing / training.	
4. Identify the flight operations and aircraft / equipment requirements while operating under FAR Part 135 or 121.	
5. Offer examples and identify the differences in weather minimums required for VFR and IFR operations under Parts 91, 135 and 121.	

ASA223 - Comm Pilot Multi-engine

Overview

Course Description

This course is designed to provide the appropriate aeronautical skill and decision making tools in compliance with the Federal Aviation Administration (FAA) approved Part 141 training curriculum for the addition of a multi-engine land class rating to the existing Commercial pilot certificate. During stage one of the training, the student will become familiar with the multi-engine airplane, human factors, concepts and issues relating to multi-engine operations. The student will learn airplane systems and aerodynamics and how to accurately compute and control the weight and balance for the multi-engine airplane. The student will be able to analyze multi-engine performance and compute accurate values from multi-engine performance data. In the second stage of the course, the student will acquire the aeronautical knowledge necessary for multi-engine VFR operations. The student will learn the principles, techniques, and procedures associated with engine out aerodynamics and critical decision making in engine out operations for the multi-engine airplane. In stage three of training, the student will demonstrate knowledge of basic instrument procedures and acquire the knowledge required to plan safe flight operations under IFR in the multi-engine airplane. The student will learn procedures and maneuvers that apply to instrument flight in the multi-engine airplane during normal and engine out operations. Instruction in an Advanced Aviation Training Device is also available. Upon successful completion of this course, the student will possess the aeronautical skill and knowledge to pass the FAA practical and oral exam for the addition of the airplane multi-engine land class rating to the existing Commercial pilot certificate.

Total Credits

Total Credit Hours:

2

Billing Hours ⓘ

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

1

Lab Hours

Lab Hours (per week):

1

Other Hours

Other Total Hours:

3

Requirements

Advisement Comments

Student must meet with the instructor of Aviation Programs prior to enrollment. Possession of the Commercial pilot certificate (SEL), Instrument Airplane rating and a second class medical. U.S. citizenship or TSA approval.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The student will obtain the aeronautical skill and experience necessary to meet the requirements for the addition of an airplane multiengine land class rating to an existing Commercial Pilot certificate.	1, 2, 3	1, 2, 4

ASA223L - Comm Pilot Multi-engine Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1

ASA226 - Aircraft Safety

Overview

Course Description
This course examines the role of various regulators and operators concerning contemporary safety issues directly affecting aviation operations. Primary focus is on the application of Single-pilot Resource Management and aeronautical decision-making tools with the review of aviation related accidents to identify accident casual relationships in an effort to reduce future aviation accidents. Related topics include: various safety developments in the air and on the ground, aviation security, and aviation safety management programs.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ASA126 Crew Resource Management

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Learn the various agencies and organizations responsible for contributing toward aviation safety and evaluate their role.		
Assess the significance of accident and incident reporting on increasing aviation safety.		
Compare and contrast the accident causation models.		
Assess human factors at different organizational levels as the primary or contributory cause of aviation accidents.		
Evaluate the various air traffic control safety developments.		

ASA230 - Flight Inst. Theory (Airplane)

Overview

Course Description

This course is designed to provide the appropriate knowledge, skills, and aeronautical decision making tools in compliance with the Federal Aviation Administration (FAA) approved Part 141 training curriculum for the Certified Flight Instructor certificate. During stage one of the course, the student will become familiar with learning theories, styles, and domains of learning, and communications techniques. The student will learn about the teaching process, teaching methods, lesson plans, evaluation of student performance, and human factors. In the second stage of the course, the student will begin to apply the principles of planning and organizing ground and flight training lessons. The student will acquire practical experience by conducting practice ground training lessons. The student will obtain the instructional knowledge required to teach Private and Commerical pilot students, including the recognition, analysis, and correction of common student errors. Instruction in a flight training device is also available. Upon successful completion of this course, the student will possess the aeronautical knowledge to pass the FAA written exam for the Certified Flight Instructor certificate.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ASA211 Commercial Flight Theory, ASA212 Commercial Pilot Airplane I

Advisement Comments

Requires Airplane Commercial Pilot Certificate with instrument airplane rating, Second Class FAA medical.

In accordance with Appendix F of FAR Part 141, at least 40 hours of ground training will be completed for the Certified Flight Instructor aeronautical knowledge requirements.

Learning Objectives

Learning Objectives

The course objective is for the student to acquire the aeronautical knowledge necessary to successfully pass the FAA aeronautical knowledge exams associated with the Certified Flight Instructor certificate. The course objectives are expressed in each of the two different Stages of ground training. In Stage I, the student will become familiar with learning theories, styles, and domains of learning, and communications techniques. The student will learn about the teaching process, teaching methods lesson plans, evaluation of student performance, and human factors. In the second stage of the course the student will begin to apply the principles of planning and organizing ground and flight training lessons. The student will acquire practical experience by conducting practice ground training lessons. The student will obtain the instructional knowledge required to teach Private and Commercial pilot students, including the recognition, analysis, and correction of common student errors.

ASA231 - Cert. Flight Instructor (ASEL)

Overview

Course Description

This course is designed to provide the practical flight training required for the completion of the Certified Flight Instructor, airplane single engine land, certificate utilizing an approved FAA part 141 training curriculum. Additional hours of instruction in LCCC's flight training device are also available. The one lecture hour of practical application may be integrated into the ASA 230 flight theory course as appropriate at the discretion of the course instructor. The practical course instructor will facilitate the resolution of any flight training issues that may arise. The student will be required to successfully pass each Stage, the end of course, and FAA flight check-rides as part of the course completion.

Total Credits

Total Credit Hours:

2

Billing Hours ⓘ

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

1

Lab Hours

Lab Hours (per week):

1

Other Hours

Other Total Hours:

4

ASA231L - Cert Flight Instructor Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours ⓘ

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):

1

ASL101 - American Sign Language I

Overview

Course Description

Introduction to American Sign Language including basic expressive and receptive skills, the manual alphabet, facial expression, and body gestures. Emphasis on conversational skills in functional situations, simple sentence structure, and knowledge of the Deaf culture and the Deaf community.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The student will demonstrate the ability to use expressive and receptive skills in functional situations: introducing oneself; exchange personal information; describe surroundings, indicate where one lives/transportation methods; describe family members; and describe activities.		
The student will demonstrate the ability to use basic grammatical concepts and sentence structure.		
The student will demonstrate the ability to use the manual alphabet as an expressive and receptive communication skill.		
The student will demonstrate an understanding of the culture and language of the Deaf community.		

ASL105 - American Sign Language II

Overview

Course Description
A continuation of the receptive and expressive communication skills learned in ASL 101. Emphasis will be on conversational skills in fuctional situations, continued vocabulary and sentence structure expansion, and knowledge of Deaf culture and Deaf community. Students will be expected to become involved in the local Deaf community.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ASL101 American Sign Language I

Advisement Comments
Prerequisite requires a "C" or better in ASL 101.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
The student will demonstrate the ability to use receptive and expressive language skills in functional situations: give directions, describe other people, make requests, describe family and occupations,		
Attribute qualities to others; and describe routines.		
The student will use apply nonverbal aspects (eye movements, facial expressions, gestures) within expressive communication skills.		
The student will demonstrate the use of complex sentence structure within expressive communication skills.		
The student will demonstrate fluidity with manual alphabet skills and improved fluency in signing skills, both receptively and expressively.		
The student will be able to discuss educational, medical, and social issues facing the Deaf community and learn vocational opportunities for those wanting to work in the Deaf community.		

ASL106 - American Sign Language III

Overview

Course Description

Provides further development of American Sign Language receptive and expressive skills and knowledge learned in ASL 105. Emphasis is on narrative and conversational skills functional situations, continued vocabulary expansion, and knowledge of Deaf culture and the Deaf community. Students will be expected to participate regularly in activities and programs for the Deaf in the local community. This is a total immersion course with no or very limited speaking.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ASL105 American Sign Language II

Advisement Comments

Requires a "B" or better in ASL 105.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Students will demonstrate the ability to use narrative expressive skills in functional settings: locate things around a house, make suggestions, requests, or register complaints; exchange personal information, and interact with the Deaf community and its culture.		
Students will demonstrate the ability to use conversational expressive and receptive skills in functional settings: locate, things around a house, make suggestions, requests, or register complaints, exchange personal information, and interact with the Deaf community and its culture.		
Students will demonstrate the ability to apply proper grammar and signs to construct ASL sentences when interacting with others		
Students will demonstrate knowledge of the Deaf culture and social aspects of ASL in the United States, abroad, and in the hearing society.		

AST105 - Introduction to Astronomy

Overview

Course Description

This course is designed for individuals who want to explore the universe around them. Topics of discussion will include Big Bang, scale and history of the universe, galaxies and planets, a thorough treatment of the solar system, structure of earth and sun.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Apply Scientific Method	
2. Locate and critically evaluate scientific information to develop student perspective about the universe	
3. Introduce key concepts of Astronomy	
4. Thorough knowledge of our solar system and beyond	
5. Using concepts of Physics: Motion, Energy, gravity to understand Universe	
6. Discuss light as our cosmic messenger	
7. Formation of Planets	
8. A closer look at the sun-earth connection	

AST106 - Introduction to Astronomy

Overview

Course Description

This course is designed for individuals who want to explore the universe around them. Topics of discussion will include Big Bang, scale and history of the universe, galaxies and planets, a thorough treatment of the solar system, structure of earth and sun.Note: This course requires software that is only compatible with a PC Computer with Windows 10 Operating System.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Lab Hours

Lab Hours (per week):

3

AST106L - Introduction to Astronomy Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):

3

BGT101 - Basic Statics

Overview

Course Description
A noncalculus introduction to the analysis of forces acting upon bodies at rest. Vector addition, Moments, Force systems in two dimensions and three dimensions. Trusses. Friction. Internal forces. Stress, strain, and modulus of elasticity.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT130 Industrial Mathematics, MAT165 College Trigonometry

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Recognize the various types of two-dimensional static forces.		
Analyze a system of forces using free-body diagrams.		
Calculate the forces needed to establish static equilibrium.		
Determine the location of the centroid and value of the moment of area of plane, two-dimensional shapes		
Establish the effects of friction on static systems.		

BGT102 - Strength of Materials

Overview

Course Description
A continuation of BGT 101. Bolted joints and welds. Thin- walled pressure vessels. Center of gravity and moment of inertia. Beam analysis. Torsion and angle of twist. Power transmission. Columns. Combined stresses.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BGT101 Basic Statics

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Calculate stresses and strains created by tensile and compressive loading, torsional loading, flexure (bending) and other parameters.		
Determine the factors involved in designing structural members.		
Analyze the connections between structural members—to determine the necessary joint strength to handle the loading		
Understand the parameters involved in column design.		
Design a beam based on both stress and deflection conditions.		

BGT103 - Fluid Power

Overview

Course Description
The study of fluid power applications, including hydraulics, pneumatic and fluidics. Topics of study include the design of fluid power circuitry, set-up procedures, and the operation of fluid power equipment for power transmission and machine control.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT105 Intermediate Algebra

Advisement Comments
Prereq: MAT 105 or higher

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Solve hydraulic problems using the basic laws of fluids.		
Measure pressure loss in a hydraulic and pneumatic system.		
Design a fluid system including all the components required.		
Explain the sequence of actions in a fluid system.		
Set up hydraulic and pneumatic circuits using standard commercial components.		
Select commercially available components from manufacturers' catalogs.		

BGT110 - Fundamentals of Technology

Overview

Course Description

The basic course for individuals entering any of the technology programs. Designed to give entering students the necessary skills to be successful in the beginning technical subjects. The areas covered include fundamental computer operation, introduction to word processor use, and basic technical procedures. Provides an overview of the specific technical career programs offered by the college.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2

Lab Hours

Lab Hours (per week):

2

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Utilize Microsoft Windows to perform basic computer functions.		
Use the menus in the windows environment to launch programs and change operating environment.		
Create, edit, and format documents to produce a final copy. Utilize Microsoft Word processing software package.		
Convert between various measurement units and scientific notation.		
Construct and interpret spreadsheets and graphs with Microsoft Excel.		
Solve basic mathematical equations for any variable of that equation.		
Use a scientific calculator in the solution of _____ problems.		
Be able to solder and desolder through hole components on a printed circuit board to industry I.P.C. standards.		
Be able to solder and desolder surface mount components on a printed circuit board to industry I.P.C. standards.		

BGT110L - Fundamentals of Technology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
2

BGT240 - Industrial Automation

Overview

Course Description
This course covers many of the basic fundamental principles of sorting, handling, and trasporting of workpieces through various manufcaturing processes. Standard industrial components from manufacturer's catalogs will be utilized for solving specific automation applications. Robots in various forms are an integral part of automation systems. Students will study the benefits and characteristics of each robot type and how it can be utilized most effectively.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
2

Requirements

Corequisites
ELE235 Programmable Controllers, BGT103 Fluid Power

Cross Listing
BGT240L Industrial Automation Lab

Advisement Comments
Should have completed or currently taking ELE 235 and BGT 103

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Select appropriate actuators (rotary or linear) to control a load/workpiece through its necessary path of motion.		
Select the best gripper design for specific workpieces.		
Determine a feeding and sorting procedure for accurate alignment and repeatability.		
Specify what types of control and sensing devices would be appropriate for specific applications.		
Write fundamental programs to control robot functions.		
Utilize sensors with robots to perform specific tasks.		

BGT240L - Industrial Automation Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
2

Requirements

Cross Listing
BGT240 Industrial Automation

BIO101 - Introductory Biology

Overview

Course Description
Emphasizes the unifying themes of biological science - ecology evolution and genetics; suitable for non-science majors. No prior background in science is required although it could be helpful. Laboratory work stresses the hands-on study of living organisms wherever possible, including field work around the campus pond. Vertebrate dissection is not required.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level, Math Placement - Intro Level

Advisement Comments
Requires Intro Level Reading Placement; Writing Placement or ENG 100 or ESL 251; Intro Level Math Placement or MAT 090

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Recognize the difference between science and other ways of knowing, interpret scientific data, and apply scientific reasoning.	Apply scientific reasoning
2. Characterize major types of ecosystems, identify key ecological interactions, and explain energy flow and nutrient cycling within ecosystems.	
3. Describe structure, function, and reproduction of cells.	
4. Apply the principles of inheritance and solve genetics problems.	
5. Explain biological evolution and identify key events in the history of life on earth.	
6. Recognize characteristics of major taxa of plants and animals and describe adaptations of plants and animals to their natural environment.	
7. Explore the natural world through scientific investigation and observation of living organisms.	Participate cooperatively within a team

BIO101L - Introductory Biology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO105 - Fundamentals of Biology

Overview

Course Description
This course explores fundamental concepts of biochemistry, animal cell biology, and genetics. It is designed to prepare students for higher level biology courses, particularly Anatomy and Physiology I and Microbiology.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Advisement Comments
Prereq: Intro Level Reading Placement and Writing Placement or ENG 100 or ESL 251; Intro Level Math Placement or MAT 090

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Characterize aspects of hypothesis-driven scientific inquiry.	
2. Characterize basic structures and functions of representatives of the major groups of biomolecules: carbohydrates, lipids, proteins, and nucleic acids.	
3. Describe the structure and functions of the major organelles of the animal cell.	
4. Describe oxidation of nutrients with reference to oxidative phosphorylation.	
5. Describe the eukaryotic cell cycle, and compare and contrast mitotic and meiotic cell division.	
6. Describe basic principles of Mendelian and molecular genetics.	
7. Correctly operate standard laboratory equipment such as thermometers, scales, pH meters, hot plates, pipettes, water baths, and light microscopes.	
8. Perform controlled laboratory experiments and accurately describe, record, and analyze data.	

BIO105L - Fundamentals of Biology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO107 - Biology and Society

Overview

Course Description
This course provides an overview of biological science while simultaneously highlighting a variety of current biological topics influencing and influenced by humanity. Topics covered include the methods of science, examination of data, food sources, vegetarian diets, bacterial and viral diseases, epidemics, human genetic diversity, GMOs, and ecological issues. Students will gain a basic understanding of the biology underlying contemporary issues humans face.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	COLLEGE-WIDE COMPETENCY
Recognize the difference between science and other ways of knowing, interpret scientific data, and apply scientific reasoning.	Apply scientific reasoning
Describe where food comes from, nutrients it provides, and give examples of how it is produced.	N/A
Compare vegetarian diets to standard diets, and discuss nutritional and environmental implications of vegetarian diets.	N/A
Discuss the significance of plants and fungi to human survival and culture.	N/A
Describe how natural selection works and explain contemporary examples of natural selection in action.	N/A
Discuss disease epidemics such as influenza, smallpox, Covid, and/or Ebola.	N/A
Explain the importance of genetic diversity in populations.	N/A
Describe how genetically modified organisms are produced and list examples, advantages and disadvantages of GMOs.	N/A
Evaluate the impact of human behavior on ecosystems, biodiversity, extinction, global climate change, and environmental degradation.	Evaluate ethical aspects of decision making

BIO110 - General Biology I

Overview

Course Description

This is the first of an in-depth two-part course in modern biology. General Biology I will focus on the following topics: biological chemistry, the central principles of structure and function of the cell, metabolism, inheritance and genetics. It will also include selected tools used by biologists, such as the use of the microscope, micropipette, chromatography, and spectrophotometry. Detailed lab coverage accompanies the lecture portion of this course.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Cross Listing

BIO110L General Biology I Lab

Advisement Comments

Prerequisite(s): Intro Level Reading Placement and Writing Placement or ENG 100 or ESL 251; Intro Level Math Placement or MAT 090

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Define, describe, and implement the scientific method.	Apply scientific reasoning
2. Locate and critically evaluate scientific information.	NA
3. Discuss the chemical nature of life.	NA
4. Describe basic principles of inheritance.	NA
5. Discuss energy transfer within biological systems.	NA
6. Working in a team of two or more people, develop, implement and evaluate experimental problems through discussion, data collection and analysis.	Participate cooperatively within a team
7. Write laboratory report.	NA

BIO110L - General Biology I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

Requirements

Cross Listing
BIO110 General Biology I

BIO111 - General Biology II

Overview

Course Description
The sequel to BIO 110 (assumes General Biology I coverage upon entry to class) and thus completes the in-depth, two-part course in modern biology. Topics include: evolution, cellular metabolism, plant and animal taxonomy and biology. Considerable dissection across several phyla may be required.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO110 General Biology I

Cross Listing
BIO106L Plant Science Lab

BIO111L - General Biology II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO115 - Field Biology

Overview

Course Description
A field course providing students the opportunity to enrich their science background and develop a knowledge and appreciation for the natural environment. Lecture and lab will be held in the field and classroom. ("Field course" implies extensive outdoor work.)

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
3

Requirements

Cross Listing
BIO115L Field Biology Lab

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Understand, appreciate, and discuss the processes underlying (biological) scientific knowledge.		
Select and use appropriate techniques and equipment to analyze the study area's ecology.		
Describe and discuss evolutionary and ecological relationships among living things		
Describe and discuss the processes of, and evidence for, adaptation to environmental stresses.		
Describe and discuss the taxonomic relationships among living things as well as the use of taxonomic keys.		
Identify the common trees, shrubs, flowers, insects, and birds in our area		
Describe and discuss which physical factors are important in establishing the environment in which living things must exist.		
Describe and discuss the major biomes on earth.		

BIO115L - Field Biology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

Requirements

Cross Listing
BIO115 Field Biology

BIO116 - Topics in Ecology

Overview

Course Description
This is an introductory course for both science and non-science majors who wish to develop an appreciation and understanding of the interactions between living things and their environment. Besides bacteria and viruses, humans are unquestionably the most powerful ecological agent that exist on earth. As Such their specific role(s) in determining the nature and outcomes of these interactions is of particular interest in this course.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level

Advisement Comments
Prerequisite(s): Intro Level Reading Placement and
Writing Placement or ENG 100 or ESL 251

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Develop an awareness of ecology as a science that seeks an accurate understanding of natural phenomena through observation and experimentation, and also endeavors to utilize scientific conclusions to preserve earth's ecosystems.	(8) apply scientific reasoning
2. Recognize the physical, biological, and behavioral factors and the diverse evolutionary adaptations that influence a species' natural history	N/A
3. Describe various interactions between organisms at both the population and community level, and characterize these interactions as beneficial or harmful to the organisms.	N/A
4. Explain trophic structure, diverse adaptations for nutrient acquisition, cycling of nutrients, energy flow, and the indispensable roles of producers and decomposers in ecosystems.	N/A
5. Evaluate the impact of human behavior on ecosystems, particularly as it relates to biological diversity, extinction, global climate change, and environmental degradation.	N/A
6. Recognize the continually changing nature of ecosystems, and discuss factors that impact ecosystems and the evolution of resident species through natural selection.	N/A
7. Analyze a variety of timely environmental issues in light of their ecological, social, economic, ethical, or cultural implications.	N/A

BIO119L - Herbaceous Plant Landscape Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO124 - Nutrition

Overview

Course Description
Examines and analyzes the body's needs for vitamins, minerals, and chemicals necessary for healthy functioning, as well as the role of nutrition in the development of disease. Diet and menu analysis will comprise an important component of this course. This course is useful for healthcare workers, food service personnel, or individuals interested in their own nutrition.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Advisement Comments
Prerequisite(s): Intro Level Reading Placement and
Writing Placement or ENG 100 or ESL 251; Intro Level
Math Placement or MAT 090

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Apply the scientific method.	
2. Describe the basic nutrients and explain why they are necessary to the body.	
3. List dietary sources for the various nutrients.	
4. Choose foods that are beneficial to a healthy body.	
5. Interpret food labels.	
6. Put together an appropriate diet for maintaining weight and energy balance.	
7. Discuss the role that nutrition has in the development of disease.	

BIO125 - Herbs and Herbal Medicine

Overview

Course Description
Students will learn about the history and philosphy of herbal medicine, including medicinal systems such a Ayurveda, Chinese, Unani, Siddha, and Homeopathy. Special emphasis will be placed on the pharmacological and theropeutic aspects as well as common terminology, effectiveness, safety, and government regulation of herbs.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
What is an herb		
How humans have historically used herbs		
How herbs are currently used both nutritionally and medicinally		
Possible dangers and contraindications of herbal products		

BIO130 - Cataclysm:Sci of Nat Disasters

Overview

Course Description
"Cataclysm; The Science of Natural Diasasters" is a survey of Earth's processes that have direct, sudden and violent impacts on the environment. This non-science major, non-lab course is designed for students that desire a basic understanding of natural potentially catastrophic processes such as earthquakes, volcanoes, tsunamis, floods, landslides, severe weather, wildfires, and coastal processes.Each of the studied natural processes potentially provides opportunities for biotic distribution, speciation or extinction. How societal decisions and subsequent vulnerabilities can transform natural occurrences into hazards, disasters and catastrophes will be addressed.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Advisement Comments
Prerequisite(s): Intro Level Reading Placement and Writing Placement or ENG 100; Intro Level Math Placement or MAT 090

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Use the scientific method; understand its powers and limitations.	
2. Describe basic terrestrial, marine and atmospheric natural processes and concepts.	
3. Determine how hazards, disasters and catastrophes can provide opportunities for speciation or extinction.	
4. Describe the physical and geological features that cause or contribute to the effects of natural processes.	
5. Discuss terrestrial, oceanic, atmospheric natural processes, review background data and case histories that illustrate the process and its potential effects.	
6. Analyze the effects of societal decisions upon the result of natural processes.	
7. Determine and discuss what constitutes a hazard, disaster or a catastrophe.	
8. Review the selection and use of appropriate techniques and equipment to analyze natural processes.	
9. Discuss indigenous human culture, especially agriculture, land development, and industrialization as applied to human vulnerability and sustainability of land use.	
10. When appropriate, discuss the wants, needs, and rights of the indigenous people in the study area and how modern technology impacts them.	

BIO135 - Intro to Environmental Science

Overview

Course Description

Introduction to Environmental Science will demonstrate how natural systems function and how humans influence these systems. Topics will include, but will not be limited to; environmental policy and ethics, human population growth, land use and development, environmental toxicology, freshwater and marine resources, processes and pollution, bioremediation, atmospheric processes, the use of conventional fossil fuels, and the development of alternative energy resources and renewable energy alternatives. This course is designed for non-science major students that desire a basic understanding of the science behind both environmental problems and solutions, and potential science majors who are considering Environmental Science as a major.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Advisement Comments

Prerequisite(s): Intro Level Reading Placement and Writing Placement or ENG 100 or ESL 251; Intro Level Math Placement or MAT 090 Introduction to Environmental

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate the interdisciplinary aspects of environmental science. Use and understand the scientific method.	Apply scientific reasoning
2. Explain the concepts of ethics and economics and their application to the environmental policy process.	Evaluate ethical aspects of decision making
3. Explain how environmental chemistry, in particular the characteristics of the water molecule, help support life.	N/A TAOC Competency
4. Distinguish how photosynthesis, cellular respiration and chemosynthesis relate to biotic systems.	N/A TAOC Competency
5. Demonstrate an understanding of nutrient and biogeochemical cycles.	N/A TAOC Competency
6. Evaluate the effects of human population growth on the environment and environmental policy decisions.	Think critically
7. Identify the principles, goals and approaches of land development, land use and resource management.	Evaluate ethical aspects of decision making
8. Analyze risk assessment and risk management as applied to environmental toxicology.	N/A TAOC Competency
9. Analyze the problems of freshwater supply and water quality. Address solutions to conserve freshwater supplies and reduce water pollution.	N/A TAOC Competency
10. Identify the physical, geographical, chemical and biological aspects of, and assess the human impact on, the marine environment.	N/A TAOC Competency
11. Identify the basic concepts of atmospheric science and the sources and major constituents of air pollution.	N/A TAOC Competency
12. Identify and analyze conventional fossil fuels, conventional energy alternatives, and new renewable energy alternatives.	N/A TAOC Competency

BIO137 - Intro to Environmental Science

Overview

Course Description

Introduction to Environmental Science will demonstrate how natural systems function and how humans influence these systems. Topics will include, but will not be limited to; environmental policy and ethics, human population growth, land use and development, environmental toxicology, freshwater and marine resources, processes and pollution, bioremediation, atmospheric processes, the use of conventional fossil fuels, and the development of alternative energy resources and renewable energy alternatives. This course is designed for non-science major students that desire a basic understanding of the science behind both environmental problems and solutions, and potential science majors who are considering Environmental Science as a major.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Advisement Comments

Prerequisite(s): Intro Level Reading Placement and Writing Placement or ENG 100 or ESL 251; Intro Level Math Placement or MAT 090

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate the interdisciplinary aspects of environmental science. Use and understand the scientific method.	Apply scientific reasoning
2. Explain the concepts of ethics and economics and their application to the environmental policy process.	Evaluate ethical aspects of decision making
3. Explain how environmental chemistry, in particular the characteristics of the water molecule, help support life.	N/A TAOC Competency
4. Distinguish how photosynthesis, cellular respiration and chemosynthesis relate to biotic systems.	N/A TAOC Competency
5. Demonstrate an understanding of nutrient and biogeochemical cycles.	N/A TAOC Competency
6. Evaluate the effects of human population growth on the environment and environmental policy decisions.	Think critically
7. Identify the principles, goals and approaches of land development, land use and resource management.	Evaluate ethical aspects of decision making
8. Analyze risk assessment and risk management as applied to environmental toxicology.	N/A TAOC Competency
9. Analyze the problems of freshwater supply and water quality. Address solutions to conserve freshwater supplies and reduce water pollution.	N/A TAOC Competency
10. Identify the physical, geographical, chemical and biological aspects of, and assess the human impact on, the marine environment.	N/A TAOC Competency
11. Identify the basic concepts of atmospheric science and the sources and major constituents of air pollution.	N/A TAOC Competency
12. Identify and analyze conventional fossil fuels, conventional energy alternatives, and new renewable energy alternatives.	N/A TAOC Competency

BIO137L - Intro to Environmental Sci Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO163 - Anatomy & Physiology I

Overview

Course Description
Provides students, primarily in health-related programs, with an in-depth understanding of the anatomy and physiology of complex living organisms, including humans. Biological principles, as well as the structural and functional relationships among several organ systems, are discussed. Considerable dissection is required.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level, Biology Placement

Advisement Comments
Prerequisite(s): Intro Level Reading Placement and
Writing Placement or ENG 100 or ESL 251; Intro Level
Math Placement or MAT 090; Biology Placement or
BIO 105 (C or better)

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate insight into the normal anatomy and physiology of complex vertebrates, especially the human.	
2. Describe how the various parts of the body are structurally and functionally related to one another.	
3. Demonstrate the necessity of complexity within living organisms.	
4. Demonstrate a knowledge-base essential for advanced study.	
5. Develop specific laboratory skills including dissection.	
6. Demonstrate fluency and literacy in anatomical and physiological terminology.	
7. Employ the scientific method to analyze and interpret physiological test results.	

BIO163L - Anatomy & Physiology I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO164 - Anatomy & Physiology II

Overview

Course Description

BIO 164 is the second course in a two-course series designed to examine the interrelationships between anatomy and physiology in complex organisms, primarily human beings. It is aimed predominantly at students pursuing health-related programs. The course covers the following systems: cardiovascular, lymphatic, endrocrine, respiratory, digestive, urinary, and reproductive, as well as nutrition and metabolism, and fluid and electrolyte balance. Detailed laboratory coverage accompanies the lecture portion of this course.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

BIO163 Anatomy & Physiology I

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate insight into the normal anatomy and physiology of complex vertebrates, especially the human.		
Describe how the various parts of the body are structurally and functionally related to one another.		
Demonstrate the necessity of complexity within living organisms.		
Demonstrate a knowledge-base essential for advanced study.		
Develop specific laboratory skills including dissection.		
Demonstrate fluency and literacy in anatomical and physiological terminology.		
Employ the scientific method to analyze and interpret physiological test results.		

BIO164L - Anatomy & Physiology II Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):
3

BIO205 - Principles of Botany

Overview

Course Description
Intergrated study of anatomy, growth, metabolism, adaptations, and interactions of seed plants. Emphasis is placed on their relationship with the environment.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO110 General Biology I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Describe and recognize plant cellular and subcellular structures, and anatomical and morphological features of plants.	N/A
2. Explain photosynthesis and conduct an investigation to determine how environmental factors influence it.	- apply scientific reasoning
3. Describe and recognize the distinguishing characteristics of diverse groups within the plant kingdom, including bryophytes, ferns and fern allies, gymnosperms, and angiosperms, as well as organisms traditionally included in the study of botany such as various prokaryotes, algae, and fungi.	N/A
4. Discuss history and evolutionary advances in plant form, function, life cycles, and diversity.	N/A
5. Discuss various anatomical, physiological, and behavioral adaptations of plants to diverse environments.	N/A
6. Describe the ecological, medical, and economic importance of plants.	N/A
7. Explain concepts of plant ecology including symbioses, succession, biomes, and involvement in nutrient cycling.	N/A

BIO205L - Principles of Botany Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO214 - Genetics

Overview

Course Description
Study of the principles and mechanics of heredity, including Mendelian and non-Mendelian inheritance, molecular structure and properties of genetic material, gene expression, genetic analysis of populations, and genetic technologies.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO110 General Biology I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Apply an understanding of genetic principles to the analysis of genetic problems and systems.	NA
2. Apply basic probability theory and statistical hypothesis testing techniques to the analysis of genetic problems including linkage analysis.	Think Critically
3. Explain evolution in terms of molecular genetics and population genetics.	NA
4. Discuss the mechanics and the ethics of genetic engineering	NA

BIO218 - Honors Genetics

Overview

Course Description
Study of the principles and mechanics of heredity, including Mendelian and non-Mendelian inheritance, molecular structure and properties of genetic material, gene expression, genetic analysis of populations, and genetic technologies. Includes lab.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO110 General Biology I

Advisement Comments
Requires GPA 3.0 or higher, or permission of instructor

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Apply an understanding of genetic principles to the analysis of genetic problems and systems.	NA
2. Apply basic probability theory and statistical hypothesis testing techniques to the analysis of genetic problems including linkage analysis.	Think critically
3. Explain evolution in terms of molecular genetics and population genetics.	NA
4. Discuss the mechanics and the ethics of genetic engineering	NA
5. Apply investigative laboratory skills relevant to basic genetics, including the production and analysis of genetic crosses, the microscopic study of chromosomes, electrophoresis, DNA isolation, the handling and genetic analysis of microbes, basic recombinant DNA techniques such as restriction digests and bacterial transformation.	
6. Design, conduct, statistically evaluate, interpret, and present the results of a genetic experiment.	Communicate effectively

BIO218L - Genetics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO220 - Introduction to Microbiology

Overview

Course Description
A general study of pathogenic and nonpathogenic microscopic life forms commonly encountered in biological work, especially in the medical fields. Emphasis is placed on structure and function of the organism in relation to the disease process. Laboratory studies include methods of culturing and identifying representative forms.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO105 Fundamentals of Biology

Advisement Comments
Prerequisite(s): BIO 105 or BIO 110 or BIO 163 or
VET 101, or permission of the instructor

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Describe proper clothing, protective equipment, and procedures used to work safely in a microbiology laboratory.	N/A
2. Use standard laboratory tests and appropriate references (e.g. *Bergey's Manual*) to identify unknown bacteria.	-apply scientific reasoning
3. Describe the structure of a prokaryotic cell and the functions of its parts.	N/A
4. Correctly perform Gram, endospore, acid-fast, and capsule stains.	N/A
5. Compare and contrast ATP-production strategies: fermentation, anaerobic respiration, and aerobic respiration.	N/A
6. Describe the function of genes with regard to DNA replication, transcription, translation, mutation, bacterial transformation, and bacterial conjugation.	N/A
7. Describe the viral replication cycle.	N/A

BIO220L - Intro to Microbiology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

BIO250 - Select Topics/Natural Science

Overview

Course Description
An interdisciplinary science course designed to introduce students to various topics within the natural sciences. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include the human genome project, string theory, stem cell research, history of science, endocrine disruption, global environmental issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as BIO/CHE/PHY 251.

Total Credits

Total Credit Hours:
1

Billing Hours ⓘ

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
BIO110 General Biology I, CHE111 General Chemistry I

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Use critical thinking skills to evaluate scientific data and interpret its significance		
Demonstrate literacy in issues related to natural science that are of current global scientific concern		
Demonstrate effective communication and listening skills		
Demonstrate the ability to discuss the quality and validity of potential scientific information		

BIO251 - Select Top/Natural Science II

Overview

Course Description
An interdisciplinary science course designed to introduce students to various topics within the natural sciences. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include human genome project, string theory, stem cell research, history of science, endocrine disruption, global environment issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as BIO/CHE/PHY 251.

Total Credits

Total Credit Hours:
1

Billing Hours ⓘ

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
BIO250 Select Topics/Natural Science

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Use critical thinking skills to evaluate scientific data and interpret its significance		
Demonstrate literacy in issues related to natural science that are of current global scientific concern		
Demonstrate effective communication and listening skills		
Demonstrate the ability to discuss the quality and validity of potential scientific information		

BIO270 - Pathophysiology

Overview

Course Description
In-depth study of disease processes of the human body. It will take the format of etiology, diagnosis, and treatment of representative diseases from several body systems.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO163 Anatomy & Physiology I, BIO164 Anatomy & Physiology II

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the basic anatomy and physiology of each body system.		
Describe the disease process occurring at the cellular and tissue level.		
State signs and symptoms of representative diseases.		
Explain procedures and tests used in arriving at a diagnosis for the diseases studied.		
Describe possible treatments and prognosis for these diseases.		

BIO297B - Lehigh U Student Research

Overview

Course Description

An introduction to independent research in an analytical biochemistry lab. Emphasis is placed on planning and executing experiments, quantitative data analysis, and presenting research findings on the subject of the effects of oxidized lipids in biological membranes. Laboratory work includes performing basic biochemical techniques, operating advanced instrumentation, and using data analysis software. [test]

Total Credits

Total Credit Hours:

1

Billing Hours ⓘ

Billing Hours Min:

1

Lab Hours

Lab Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Know and demonstrate a knowledge of lab functions including safety, waste disposal, and how to maintain a laboratory notebook		
Identify and generally describe biomolecules in biological membrane environments		
Name and draw basic structures for membrane lipids		
Describe the basics of lipid oxidation and the general effects of oxidized lipids in cell membranes as well as their role in disease and immune response		
Demonstrate and use basic laboratory techniques and procedures for preparation of membrane model systems (liposomes, supported lipid bilayers)		
Be able to operate and have a fundamental understanding of specific instruments: Dynamic Light Scattering (DLS), Quartz Crystal Microbalance with Dissipation Monitoring (QCM-D), and Total Internal Reflective Fluorescence Microscopy (TIRFM)		
Use software packages (ImageJ, MATLAB, GraphPad Prism) to analyze experimental data and prepare quality reportable figures		
Present experimental findings to the scientific community and general public in the form of a poster and presentation		
Prepare a mock research proposal in the style of the National Science Foundation Graduate Research Fellowship Program (NSF-GRFP)		

BIO297C - Research at Lehigh University

Overview

Total Credits

Total Credit Hours:

1

Billing Hours ⓘ

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
3

Other Hours

Other Total Hours:
4

Requirements

Advisement Comments
This course is open only to students who have applied and been accepted to the RE@L Scholar program. Scheduling of the course will be on an individual basis.

Learning Objectives

Learning Objectives
Demonstrate knowledge of basic research and laboratory functions

Demonstrate proficiency in basic research laboratory techniques and procedures

Demonstrate proficiency in the operation of instrumentation relevant to the area of research

Use various software for data analysis relevant to the area of research

Communicate experimental findings to the scientific community in the form of a poster and presentation

BUS109 - Business as a Major

Overview

Course Description
This course is designed as an overview of the componentsof business. This course will introduce students to various careers in business as accounting, management, marketing and entrepreneurship. In addition, students will be introduced to various resources available to them as business majors, along with learning valuable study skillsfor business courses.

Total Credits

Total Credit Hours:
1

Billing Hours ⍰

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Apply organization and time management skills to professional and academic planning.		1
Demonstrate and articulate a variety of study skills for business students.		1
Identify and utilize databases available to students through the LCCC library to evaluate credible, scholarly references.		5, 6
Demonstrate and identify the basics of the field of Business.		1
Develop interpersonal skills for working within a diverse business environment.		7
Identify career opportunities in business and develop a future career plan relevant to the field of Business.		1

BUS120 - Intro to Business Organization

Overview

Course Description

The nature of business in regard to structure, principal activities, and problems are explained. Among the principal topics considered are the framework of business; business operations; staffing and labor law; management; finance and accounting; competition; research; taxation; trade and globalization; economic indicators; and legal, governmental and regulatory issues; and distribution and logistics. A business plan project will be explored.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Discuss the impact of ethics and social responsibilities on business.	BMG 1 BMGC 1	1, 9
Illustrate the strategies used in reaching global markets and explain the role of multinational corporations.		1
List and describe the different forms of business ownership and business combinations.		1
List and describe the functions and skills needed to be a manager.		1
Identify the four elements of a company's marketing mix.		1
Explain the purpose of the balance sheet and identify its three main sections.		1
Develop a basic business plan.		1, 2

BUS130 - Personal Money Management

Overview

Course Description
Topics include budgeting, investments, estates, insurance selection, home buying, renting, consumer purchasing, social security benefits, retirement, and other subjects related to personal money management.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the basics of personal finance including the time value of money, budgeting, and tax strategies.		1, 3
Evaluate various types of consumer credit, consumer purchasing strategies (including home buying), and options for insuring your resources.		1
Analyze the advantages and disadvantages of various investment options and discuss the benefits of retirement planning and estate planning.		1, 3

BUS141 - Principles of Advertising

Overview

Course Description
An introduction to the principles, procedures, and problems of modern-day advertising using an integrated marketing communications approach. Planning and research; preparing and creating ads; as well as media strategy and ad placement for maximum return will be included. Specific topics such as digital and social media applications will be explored.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the concept of integrated marketing communications.		1
Explain the processes of establishing objectives, budgeting, development, implementation, and evaluation of an integrated marketing communications program.		1
Evaluate different media options including television, radio, print, support, direct marketing, digital, and social media.		1
Describe how to measure the effectiveness of a promotional program, the impact of regulation of advertising, and decisions relating to advertising internationally.		1

BUS150 - Business Statistics

Overview

Course Description

A one-semester treatment of applied statistics using the computer, specifically designed for students in business related programs. Focuses on what statistical methods are available, which to use in a variety of business situations, and the most compelling methods of reporting the results. In lab, students will be presented with real data, cases and projects from a variety of practical business applications. Topics include descriptive statistics, probability, sampling, hypothesis testing, regression, analysis of variance, Chi square, time series forecasting, and statistical process control. Credit will not be given for both BUS 150 and MAT 150.

Total Credits

Total Credit Hours:

3.5

Billing Hours

Billing Hours Min:

3.5

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Math Placement - Intro Level

Advisement Comments

Prerequisite(s): Intro Level Math Placement or MAT 090
(or higher)

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Summarize and appropriately present/display data.		1, 2
Calculate probabilities using discrete and continuous probability distributions.		1, 3
Formulate and interpret confidence intervals and hypothesis tests for means and proportions.		1, 3
Analyze multiple regression models.		1, 3

BUS150L - Business Statistics Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1.5

BUS152 - Principles of Sales

Overview
Course Description
This course familiarizes the student with basic principles of career selling. It reviews the salesperson's function in society, presents the characteristics and opportunities of a sales career, surveys required knowledge and skills for selling, presents details associated with the sales process, and provides suggestions for improving sales effectiveness. Emphasis is placed upon classroom student sales presentations and case studies.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the role that psychology plays in deciding why people buy.		1
Describe why communication is paramount to relationship building.		1, 2
Explain the importance of sales knowledge relating both to the customer as well as the products and services being sold.		1
Describe the methods and strategies involved in creating a successful sales presentation.		1, 2

BUS209 - Business Communications

Overview
Course Description
Fundamental principles of clarity, courtesy and construction are applied to creating/writing effective electronic-and paper-based business messages such as phone calls, e-mails, memos, letters, reports, social media posts, and presentations for American and global business communications. These principles are applied first to sentences and paragraphs and then to creating/writing complete business messages. Preparing and making electronic and other types of presentations will be studied and practiced.

Total Credits
Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Discern that communication involves two dichotomies (listening-speaking and reading-writing) and identify ways to handle and improve listening, speaking, reading, and writing skills within a contemporary domestic or global business-world framework.		1, 7
Recognize standard vocabulary applicable to contemporary business communications.		1, 2
Recognize different types of business messages (such as phone calls, letters of inquiry, response, order, adjustment).		1, 2
Discern and compose effective written or electronic messages, such as texting, reports, or e-mails, for use in internal and external contemporary businesses communications.	BMG 2 BMGC 2 HMN 2	1, 2
Demonstrate the ability to construct mailable/electronic business materials with proper grammar, correct spelling, standard formatting, correct punctuation, and standard message style.	BMG 2 BMGC 2 HMN 2	1, 2
Distinguish satisfactory business messages from unsatisfactory business messages based upon the standards described in the primary reference sources used in this course.		1, 2
Analyze reference sources (internal and external) to create business reports.		1, 2
Critique oral communications skills.		1, 2

BUS211 - Principles of Management

Overview

Course Description
This course is a genereal introductory study of the management of business and nonbusiness entities. It presents management as process of organization and coordination to achieved objectives as well as the necessity for leadership as a guiding principle. An introduction to management and the associated social responsibilities is followed by additional topics including: managerial decision making, critical thinking; team building and group dynamics; organizational structure, globalization, organizational culture; change theory; entrepreneurship; and organizational controls.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Advisement Comments
Prerequisite(s): Intro Level Writing Placement or
ENG 100 (or higher)or ESL 251

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Assess theories and models of management and leadership including the four major functions of management and the characteristics of effective and responsible leadership. (Unit I)	BUAA PO#4 BMG PO#3	1
Discuss the nature of organizational environment and identify the differences in domestic business organizations and global organizations. (Unit II)		
Evaluate the processes that affect decision making and the strategic planning process. (Unit III)		
Identify the basic elements of organizations and the nature of organizational design. (Unit IV)		
Explain the nature of the individual-organizational relationship and examine group dynamics and teams function within the workplace. (Unit V)		1, 2, 4
Explain the purpose and characteristics of control and the importance of operations management. (Unit VI)		

BUS221 - Principles of Marketing

Overview

Course Description
A study of the organizational function of processes and procedures for the creation, communication, and distribution of goods and services and the management of customer relationships as it creates value and benefit to the organization and its stakeholders. Consumer behavior and all elements of the marketing mix (product, place, price and promotion) will be analyzed. The role of social media and mobile marketing is explored.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify the various types of marketing research and how consumer behavior impacts internal and external marketing plans and strategy.		1, 2
Identify target markets and describe the difference in business-to-business and consumer marketing and buying practices.		2
Discuss how the fours P's are used and the effect they have in developing a market strategy.		2
Discuss the function of supply chain management and the types of intermediaries within supply chain channels from the manufacturer to the consumer.		2

BUS241 - Business Law I

Overview

Course Description

This course introduces the student to the legal environment governing the operations of modern business including the areas of contract law, tort law, negligence, criminal law, constitutional law and court, intellectual property law, product liability, employment law, and ethics and social responsibility.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Reading Placement - Intro Level

Advisement Comments

Intro Level Reading Placement or RSS 100 or ENG 105

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define legal rights and duties and explain how those duties are protected.		2
Recognize how government regulations and administrative agencies affect businesses in the United States.		1
Explain the general legal principles that impact international trade.		2
Discuss how criminal and civil acts, and corresponding elements, apply to a business.		1, 2
Explain how the internet has impacted the legal environment as it relates to Cyberlaw and business.		1, 2
List the six essential elements of a contract and explain how each of the six essential elements of a contract contributes to the validity of contracts.	ACC 9 ACCC 8 BUAA 5 BMG 5 BMGC 5 HMN 4	1, 2
Explain labor and employment laws and identify situations that frequently arise in employment settings from both a legal and ethical prospective.		1, 2

BUS246 - Business Ethics

Overview

Course Description

This course introduces students to the concept of ethics, the reasoned study of what is morally right and wrong, good and bad; it will give students an introduction to the fundamental issues associated with ethical behavior in business. Ethical theory will be studied; this theory will be applied to case problems so that students will learn to think critically about real-world dilemmas that they encounter in business settings.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define ethics and identify different types of ethical dilemmas.		1
Analyze ethical conflicts in a business environment.		1, 9
Explain how business policies and decisions impact various stakeholders in terms of social responsibility.		1, 9
Describe how businesses should design policies and procedures to create a company culture that promotes ethical behavior by employees.		1, 9
Explain conflicts between corporate ethics and business practices in foreign countries.		1, 9
Discuss business ethics as it relates to product safety, sales, and advertising.		1, 9

BUS248 - Essentials of Entrepreneurship

Overview

Course Description

Entrepreneur: a person who recognizes an opportunity and organizes and manages a business, assuming the risk for the sake of potential return. This course will explore the creative and innovative thought process used by entrepreneurs to market, finance, and operate a small business effectively.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the entrepreneurial mindset and entrepreneurial pathways to success.		1, 2
Identify why an entrepreneur must create a competitive advantage and describe how an entrepreneur can create a competitive advantage in the market.		1, 3
Identify the financial aspects related to entrepreneurship.		1, 3
Describe leadership styles and the role leadership plays in entrepreneurship.		1, 2
Describe the legal aspects related to small business operations and techniques for effectively addressing risk management, operations, growth, and exit strategies.		1, 2
Identify a market opportunity and develop a business plan targeting that market opportunity.		1, 3

BUS252 - Human Resources Management

Overview

Course Description
Introduction to the responsibilities and work of a modern human resources administrator. Topics include employment planning, recruitment, selection, training, performance management, compensation and benefits, and related law.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the role of human resources in strategic management.		1
Analyze the elements of recruitment and selection and effective strategies for performance management, training, and development.		1, 7
Explain decision making related to employee compensation and benefits.		1

BUS254 - Human Resources Law

Overview

Course Description
Designed to prepare students in the area of employment law. Focus will be on issues faced by Human Resource Adminstrators in a diverse workforce. The strategic importance of fairness and legal compliance will also be emphasizes. The student will be made aware of the influence of governmental regulation as it pertains to recruitment, hiring, evaluating, and dismissal.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BUS241 Business Law I

Corequisites
BUS252 Human Resources Management

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the foundation of the regulation of the employment relationship, specifically equal employment opportunity the Title VII of the Civil Rights Act of 1964.		1, 9
Describe the regulation of discrimination in employment relating to race, national origin, or gender.		1, 7
Describe the regulations related to sexual harassment and sexual orientation and gender identity discrimination.		1, 7
Explain regulation of employment as it relates to employees' right to privacy; employee benefits and protections; and labor law and collective bargaining.		1

BUS256 - International Business

Overview

Course Description

An introduction to the basic concepts involved in international business. It presents an overview of the means of conducting international business with emphasis on what makes international different from domestic. Among the topics considered are the effects of the social systems within the countries on the conduct of international business, the dynamic interface between countries and companies attempting to conduct foreign business activities, the financial exchange systems, institutions that measure and facilitate international transactions and the major theories explaining international business transactions, the institutions influencing those activities.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level

Advisement Comments

Prerequisite(s): Intro Level Writing Placement or
ENG 100 or ESL 251; ECO 201

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify the types of national differences in culture, politics, economics, and legal systems that need to be considered when doing business internationally		1, 7
Describe international trade theory and related government policy.		1
Explain international monetary systems including foreign exchange markets and global capital markets.		1
Describe the strategy and organization of international business.		1
Analyze international business functions.		1

BUS257 - HRIS/Payroll Administration

Overview

Course Description
This course is a study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. Along with performing payroll functions, students will be introduced to Human Resource Information Systems (HRIS). Students will learn the critical designs, management, and systems that are available in the workplace.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ACC160 Principles of Accounting I, CIS105 Intro to Comp & Applications

Corequisites
BUS252 Human Resources Management

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the importance and the benefits of a fully integrated HRIS system.		1, 2
Analyze the role of pay and payroll decisions in the overall HR planning strategy as it pertains to recruiting and retaining employees.		1
Develop personnel and payroll records compliant with current law.		1
Process payroll and tax data properly and prepare the appropriate reports.		1, 3

BUS258 - Labor Relations

Overview

Course Description
A study of the interrelationships between management's human resource policies and practices and the philosophies and practices of unionism. Exercises will focus on management and union relations, bargaining and the impact of external forces such as government and public attitudes. Discussions will also cover past, present, and future trends and issues of unionism.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BUS252 Human Resources Management

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define labor relations terminology and describe the historical development of labor relations in the US.		
Apply the public laws that control employee organization and bargaining.		1
Identify and explain the necessary components of the labor contract administration as it applies to the collective bargaining process and the problem-solving processes of dispute resolution.		1
Differentiate between private and public sector labor relations and list the pros and cons of both types of unions.		2
Describe the various types of anti-union defenses employed by managers and how unions counteract these defenses.		1, 2

BUS259 - Compensation & Benefits Mgt

Overview

Course Description
A study of the principles and systems of compensation programs, including employee benefits and incentive awards. Focus will be on compensation/benefit program planning, design, development and implementation; employee communications; and the various internal and external factors impacting on compensation and benefits programs.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BUS252 Human Resources Management

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain basic compensation concepts and the importance of a compensation strategy.		
Explain internal factors used to determine a compensation structure.		1
Analyze how external competitiveness is used to determine pay levels.		1
Evaluate factors used to determine individual employee pay.		1
Describe various employee benefit options.		
Explain the impact of unions and compensation for special groups.		
Describe contemporary challenges in managing compensation systems.		1

BUS262 - Recruit, Train & Eval Employee

Overview

Course Description

Deals with the principles of effective recruiting and hiring practices. Topics include recruiting, interviewing and hiring efficiently with an awareness of cost containment and compliance with currect employment regulations. The concept of measuring job performance is examined as well as how to use these measurements to determine employee training and development needs.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

BUS252 Human Resources Management

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain how human resource planning is utilized to meet organizational goals.	HMN 7 HMNC 7	1
Evaluate recruiting plans, identify recruiting sources, and explain the advantages/disadvantages for various methods and sources.	HMN 7 HMNC 7	1, 7
Analyze the issues involved in retaining employees and creating job satisfaction.	HMN 7 HMNC 7	1
Describe best practices related to evaluating employee performance.	HMN 7 HMNC 7	1

BUS284 - Business Internship

Overview

Course Description
Provides the students in various areas of business with hands-on experience. The student will work a total of 300 hours for 4 credits (each additional credit equates to 75 hours work). Students may also be required to attend campus meetings or seminars, complete projects, maintain journals, or do other assigned tasks as instructed. The internship must be pre-approved by the faculty member who will evaluate the intership experience according to deadlines established in the Business Internship Packet.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Other Hours

Other Total Hours:
225

Requirements

Prerequisites
ACC161 Principles of Accounting II, BUS120 Intro to Business Organization, BUS209 Business Communications, BUS211 Principles of Management, BUS221 Principles of Marketing, CIS105 Intro to Comp & Applications

Advisement Comments
Prerequisite(s): ACC 161; BUS 120 or 248; BUS 209,
211, 221; CIS 105; minimum GPA of 2.0; and permission
of instructor

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Analyze the applicability of theory to on-the-job situations.		
Identify management theories and specific applications of such theories.		
Effectively communicate with supervisors, peers, and subordinates, as well as customers.		
Prioritize time and materials.		
Identify the financial transactions with a business.		
Identify the role of the employee in the overall business.		

BUS285 - Global Business Practice Firm

Overview

Course Description
Using a global business model, students work as team members in a simulated business firm in a technologically current facility. Students will perform various business functions such as accounting/finance, marketing, human resources, computerized information processing and electronic commerce as the firm enters into virtual financial transactions with other simulated companies located in the United States and other countries. Students are involved in decision making, critical thinking, problem solving, and activities.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
4

Requirements

Prerequisites
ACC161 Principles of Accounting II, BUS120 Intro to Business Organization, BUS209 Business Communications, BUS211 Principles of Management, BUS221 Principles of Marketing, CIS105 Intro to Comp & Applications

Advisement Comments
Prerequisite(s): ACC 161; BUS 120 or 248; BUS 209,
211, 221; CIS 105; or permission of instructor

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Produce conventional written business communications.	BUAA PO#1, BMG and BMGC PO#2, HMN PO#2	#1 Think Critically #2 Communicate Effectively
Apply critical thinking and problem-solving skills	BMG PO#7, HMN PO#3	#1 Think critically
Participate cooperatively and effectively within a team	BMG PO#7, HMN PO#3	#4 Participate cooperatively within a team
Create an eportfolio documenting individual and team contributions		#2 Communicate Effectively #5 Use current technology effectively

CED272 - Cooperative Education

Overview

Course Description
The student will work in a supervised internship in the community. The work assignment is selected according to the student's career goals. Students should apply for this learning experience through the appropriate department Dean at least six weeks prior to the end of the semester preceding the work period. The number of credits earned in the course is usually based on one credit for seventy-five hours of work experience. CED 272 may not be repeated for credit. A maximum of 6 credits can be earned through the Cooperative Learning Experience.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Requirements

Advisement Comments
Prerequisite(s): Students must have completed half of the credits in their program with a minimum 2.3 cumulative grade point average (GPA) and have been approved by the appropriate dean.

CED272A - Cooperative Education

Overview

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

CFS105 - Computer Ethics

Overview

Course Description
Computer Ethics examines the impact ethical issues have on information technology. The course describes the methods to address these issues and focuses on the positive impact an IT professional should have in the field.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify the associations dedicated to enforcing a code of computer ethics	
2. Describe the appropriate ethical behavior of an IT professional	
3. Identify types of computer and internet crimes and list methods to avoid such crimes	
4. Debate privacy versus security rights	
5. Debate freedom of expression versus criminal activity over the Internet	
6. Define intellectual property and discuss its issues	
7. Develop quality management standards and safe systems	

CFS110 - Intro to Computer Forensics

Overview

Course Description
This course describes how to properly conduct a computer forensics investigation using the appropriate computer forensic tools. It also details the court criteria for a witness to be considered an expert.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications, NET110 CompTIA Network Essentials, NET111 CompTIA A+ Core 1, CIS250 Operating Systems, CFS105 Computer Ethics

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Perform a computer forensic investigation		
Demonstrate the ability to use the appropriate computer forensic tools		
Identify the controls required in collecting digital evidence		
Recover email, graphic images and operating systems boot files		
Apply computer forensics to a crime scene investigation		
Complete a forensic analysis report		
Discuss the ethical requirements of a computer forensic scientist		

CFS110L - Intro to Comp Forensics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CFS115 - Intro to Digital Security

Overview

Course Description
Fundamental issues and concepts of digital security; aspects of computer and digital crime; methods to uncover, protect, exploit, and document digital evidence; tools, techniques, and procedure to perform computer and digital crime investigation.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

	COURSE OBJECTIVE		PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1.	Understand the problems associated with computer crime		
2.	Know the evolution of computing devices and operating systems		
3.	Know the evolution of computer crime		
4.	Understand web-based criminal activity, malware, data theft and manipulation, cyberterrorism, and neotraditional criminal activity		
5.	Understand the different methods of identity theft/fraud and the crimes facilitated by identity theft/fraud		
6.	Identify differences in terrorism and the convergence of terrorism and organized crime		
7.	Identify and understand the prosecutorial rules for cybercrime		
8.	Know how the first amendment effects cybercrime activity, including case dealing with child pornography, child protection laws, and Internet gambling		
9.	Understand search and seizure laws and the fourth amendment		
10.	Understand and identify key principles of the various privacy acts		
11.	Define computer forensic terminology		
12.	Understand how to collect and store digital evidence		
13.	Identify and use popular forensic software		
14.	Perform search and seizure of computer-related evidence		
15.	Know how to prepare for a crime scene search including associated paperwork and legal documents		
16.	Know how to secure a digital crime scene, locate and store evidence, and interview witnesses		
17.	Identify and create evidence reports		

CFS145 - Princ of Information Security

Overview

Course Description
This course examines the field of information security. Both the managerial and technical aspects are addressed. The student will identify control measures and develop and conduct a security audit.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications, NET110 CompTIA Network Essentials, NET111 CompTIA A+ Core 1, CFS105 Computer Ethics, CFS110 Intro to Computer Forensics, BUS120 Intro to Business Organization

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Detail the seven phases of information security and its components.	
2. Identify, assess and control factors in risk management.	
3. Define cryptography.	
4. Identify security personnel and practices.	
5. Develop a security plan for industry and education.	
6. Conduct a security audit for industry and education.	
7. With appropriate study, be prepared to take the CISSP (Certified Information Systems Security Professional) certification exam.	

CFS155 - Network Security

Overview

Course Description
A comprehensive guide to network security is provided in this course. General security concepts discuss authentication methods, common network attacks and how to safeguard systems. Communication security covers remote access, email, the Web, directory and file application of border controls such as DMZs, extranets and intranets. Cryptography evaluates symmetric and asymmetric algorithms, PKI certificates and their application. Operational Security details disaster recovery, forensics and continuity. The lab component provides the student with extensive hands-on experience with securing networks, intrusion detection, hot fixes and installing and configuring a wireless network using a Cisco Aironet 340.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
identify common network intrusions and develop a plan to safeguard a network.		
secure a Windows server environment.		
configure a virtual private network (VPN).		
install and configure a secure wireless network.		
use cryptography to secure a network.		
apply computer forensic methods to isolate computer criminal activity.		
develop and implement a disaster recovery plan.		
with appropriate study, take the CompTIA Security+ certification exam.		

CFS155L - Network Security Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

Requirements

Cross Listing
CFS155 Network Security

CFS205 - Intrusion Detection/Prevention

Overview

Course Description
This course introduces intrusion detection systems (IDS) and demonstrates to students how these systems can be used to analyze attacks, mitigate damage, and track attackers.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Corequisites
NET121 CompTIA A+ Core 2

Learning Objectives

Learning Objectives

- Have a working understanding of network protocols and IP addressing
- Understand Infrastructure monitoring and the tools and techniques for monitoring a network
- Define intrusion detection systems and how to use them
- Understand and identify the parts of the life cycle of a vulnerability
- Define a proactive intrusion prevention schema
- Understand how to set up and use attack graphs
- Know how to examine network flows and identify anomalies
- Understand and know how to use web application firewalls
- Identify and have a working knowledge of the different protection and policy models
- Understand intrusion detection systems as they relate to wireless technology
- Identify and understand physical intrusion detection for IT
- Identify the different types of physical security
- Understand the nuances of Geospatial Intrusion Detection
- Understand the techniques and limitations of geocoding
- Understand how to visually capture a network
- Understand how to use statistical graphs
- Identify how to cost-justify IDS and its components
- Know how to evaluate costs and returns on investments and build a cost-benefit analysis and associated models
- Identify the costs associated with security breaches
- Understand the cyber liability insurance business

CFS206 - Ethical Hacker

Overview

Course Description
The goal of this course is to help studetns master an ethical hacking methodology that can be used in a penetration testing or ethical hacking situation. A highlight of this course is the ability to compete in the National Cyber League competition.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
NET121 CompTIA A+ Core 2

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGE-WIDE STUDENT COMPETENCY
1. Create ethical hacking methodology	N/A
2. Understand and implement penetration testing	N/A
3. Demonstrate understanding of vulnerabilities	N/A

CFS206L - Certified Ethical hacker Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
1.5

Other Hours

Other Total Hours:
0

Requirements

Cross Listing
CFS206 Ethical Hacker

CFS297B - Gen Cyber Camp

Overview

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
0

Lecture Hours
Lecture Hours (per week):
3

CHE105 - Fundamentals of Chemistry

Overview
Course Description
For the nonscience major. Applies the principles of chemistry to consumer, environmental, and societal issues using both mathematical and nonmathematical problem solving. Will not satisfy the prerequisite for General Chemistry.

Total Credits
Total Credit Hours:
4

Billing Hours
Billing Hours Min:
4

Lecture Hours
Lecture Hours (per week):
3

Requirements
Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Learning Objectives
Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Discuss and use the scientific method	
2. Demonstrate the fundamental concepts of chemistry including basic molecular structure, thermodynamics, kinetics, units and measurement, and nuclear chemistry	
3. Explain the theoretical and practical significance of chemistry.	
4. Locate information and address technical issues related to chemical concepts and theory.	
5. Demonstrate analytical skills, critical judgment, and the ability to assess risks and benefits.	
6. Demonstrate hands-on experience with chemical phenomena.	

CHE105L - Fundamentals of Chemistry Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE106 - Physiological Chemistry

Overview

Course Description
Intended for students in various programs, such as Nursing, Veterinary Technician, or other healthcare, who require a background in the areas of General, Organic, and Biochemistry. The metric system, states of matter, acids and bases, atomic structure, structure and reactions of organic functional groups, classes of biochemicals, and the application of these to anabolism and catabolism comprise the course.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Gain an understanding of matter and its composition.	
2. Learn to use the metric system of measurements and be able to convert from one unit to another using dimensional analysis (the factor-label method).	
3. Recognize the ways that elements are combined to form compounds (ionic, covalent, and dative bonding).	
4. Be able to write and balance chemical equations and perform calculations involving equations.	
5. Recognize the way matter is arranged in the solid, liquid, and gaseous states and to solve problems involving the gas laws.	
6. Understand how the concentration of a solution is calculated and the dynamics of the solution process.	
7. Differentiate the acid, base, and salt classifications of matter and to understand the properties of each.	
8. Be able to draw structural formulas of organic molecules, recognize the classes of organic molecules, and learn about how the different class react to various reagents.	
9. Apply the principles of inorganic chemistry and organic chemistry to the molecules that form the basis of life.	
10. Learn the characteristics of the four classes of biochemical molecules.	
11. Discuss and use the scientific method.	

CHE106L - Physiological Chemistry Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE107 - Chemical & Lab Safety

Overview

Course Description
Chemical and Laboratory Safety provides a fundamental understanding of the safety topics typically of concern in an industrial or research chemical laboratory. The material is appropriate for anyone that may work in an environment where chemicals are used. This course is required in the chemical technology program. NOTE: CPR/ First Aid certification is a major component of this course. For those students taking the course on campus, on-line or through a hybrid format, the student has to provide current certification for CPR/First Aid to the instructor at the beginning of the semester. If the student can not provide current certification or is not certified, the student must come to campus at a scheduled time to complete the certification portion.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
CHE105 Fundamentals of Chemistry

Corequisites
MAT105 Intermediate Algebra

Advisement Comments
Alternatives to Prereq: CHE 106, CHE 108
Coreq: MAT 105 or higher

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Discuss the changing culture of laboratory safety in academia and industry.	
2. Demonstrate the ability to prudently plan chemical experiments with regards to safety.	
3. Evaluate hazards and assess risks in the laboratory.	
4. Demonstrate knowledge in the management of the shipment, receipt, and storage of chemicals.	
5. Discuss appropriate precautions and experimental techniques when working with chemicals.	
6. Discuss aspects of legal and ethical waste disposal and toxic waste reduction.	
7. Discuss inspection and maintenance of laboratory facilities to maximize the safety of working conditions.	
8. Demonstrate competency in First Aid and CPR.	

CHE108 - Essentials of Chemistry

Overview

Course Description
This course is an intensive review of the fundamentals of chemistry with particular emphasis on solving chemical problems. The course is designed to prepare students with weak backgrounds for General Chemistry I.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level

Advisement Comments
Coreq: MAT 105 or higher

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Describe and use the scientific method.	
2. Make measurements realizing the uncertainty and use the principles of significant figures in all calculations.	
3. Use the factor label method to solve mathematical problems and conversions.	
4. Classify matter and describe it in terms of its physical and chemical properties as well as physical and chemical changes.	
5. Use the periodic table and demonstrate and understanding of Periodic Law.	
6. Know the structure of atoms and how and why chemical bonds form.	
7. Name and draw chemical compounds.	
8. Use stoichiometric relationships to solve problems.	

CHE108L - Essentials of Chemistry Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE111 - General Chemistry I

Overview

Course Description
For science and engineering students. Stresses nomenclature, properties, atomic and molecular structure, bonding, reactions and stoichiometry, thermochemistry of elements and compounds; gases and liquids and solids.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Chemistry Placement

Advisement Comments
Prerequisite(s): Pass Chemistry Placement Exam or
CHE 108 (C or better)
Corequisite: MAT 160 or higher

Learning Objectives

Learning Objectives
Competency 1: Introduction to Chemistry.

Behavioral Objectives: In order to attain this competency, the student should be able to:

1.1 Present the scientific method.

1.2 Classify matter on the basis of physical and chemical properties.

1.3 Classify matter on the basis of physical and chemical changes.

Competency 2: Measurement.

Behavioral Objectives: In order to attain this competency, the student should be able to:

2.1 List the common SI units of measurement, the values of selected prefixes, and the use of dimensional analysis to interconvert units of measurement.

2.2 Apply the rules for significant figures for calculation problems.

Competency 3: Atoms, Ions and Compounds.

Behavioral Objectives: In order to attain this competency, the student should be able to:

3.1 Describe the structure of the atom in terms of subatomic particles; write the isotopic

symbol for any isotope of a given element or ion.

3.2 Describe the basic features of the periodic table.

3.3 Write formulas of ionic or covalent compounds from their names and from their names write their formulas.

Competency 4: Chemical Reactions.

Behavioral Objectives: In order to attain this competency, the student should be able to:

4.1 Write and balance a chemical reaction.

4.2 Classify reactions into various types such as combination, decomposition, single

replacement, double replacement, oxidation-reduction, acid-base, precipitation and gas

forming reactions.

Competency 5: Calculations with Formulas and Chemical Equations.

Behavioral Objectives: In order to attain this competency, the student should be able to:

5.1 Use mole concept to calculate the molar mass, the number of moles from the mass of a sample, the number of atoms or molecules and molarity of solutions.

5.2 Apply the mole concept to the determination of mass %, empirical and molecular formulas.

5.3 Apply the mole concept to reaction stoichiometry calculations including limiting reagent and percent yield.

Competency 6: Gaseous State.

Behavioral Objectives: In order to attain this competency, the student should be able to:

6.1 Use kinetic molecular theory to account for the properties of gases and the gas laws

(Boyles, Charles, Avogadro, etc.).

6.2 Use gas laws to calculate the pressure, volume, temperature or number of moles from appropriate data.

6.3 Use the Ideal gas law to determine the density or molar mass of a gas and the stoichiometry of reactions involving gases.

6.4 Calculation of the partial pressure or mole fractions from the appropriate data of gas

mixtures.

6.5 Explain how the properties of real gases differ from an Ideal Gas.

Competency 7: Thermochemistry.

Behavioral Objectives: In order to attain this competency, the student should be able to:

7.1 Explain the role of heat in chemical reactions (Thermodynamic Laws).

7.2 Perform calorimetric calculations and use enthalpy tables or Hess's Law to determine the heat of a reaction.

Competency 8: The Periodic Table and Atomic Structure.

Behavioral Objectives: In order to attain this competency, the student should be able to:

8.1 Explain the relationships between the properties of electromagnetic radiation with respect to wavelength, frequency, energy and spectral region and be able to calculate the energy, frequency or wavelength from appropriate data.

8.2 Compare and contrast the Bohr and quantum theories of atomic structure and how they account for location of electrons in atoms and spectral lines.

8.3 Explain the characteristics of atomic orbitals and the quantum numbers associated with them.

8.4 Write the electronic configuration of atoms and ions.

8.5 Use the periodic table to predict the physical and chemical properties of elements,

including atomic radii, ionization energy and electron affinity.

Competency 9: Bonding.

Behavioral Objectives: In order to attain this competency, the student should be able to:

9.1 Write Lewis structures for neutral atoms, ions, ionic and covalent compounds.

9.2 Use Lewis structures and VSPER theory to predict electronic and molecular geometries.

9.3 Use the principle of electronegativity to describe the characteristics of polar covalent

bonds.

9.4 Use the polar and covalent bonds and VSEPR to determine the overall polarity of a

molecule.

9.5 Use valence bond theory and molecular geometry to determine the hybridization of atoms.

9.6 Compare and contrast valence bond, molecular orbital and metallic bonding theories and how each accounts for molecular structures and properties.

CHE111L - General Chemistry I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE112 - General Chemistry II

Overview

Course Description
This course, intended for science majors, is a continuation of General Chemistry I. It emphasizes solutions, kinetics, gaseous and solution equilibrium, acid/base and solubility equilibria, thermodynamics, electrochemistry, RedOx equations, and nuclear chemical reactions.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHE111 General Chemistry I, MAT160 College Algebra

Learning Objectives

Learning Objectives
Competency 1: States of Matter: Liquids and Solids.

Behavioral Objectives: In order to attain this competency, the student should be able to:

1.1 Compare the differences between the state of matter and the changes of state that occur.

1.2 Describe the major types of intermolecular forces and use them to explain the properties of

solids and liquids such as boiling point, melting point, surface tension and viscosity.

1.3 Describe how intermolecular forces determine solubility of polar and nonpolar substances.

Competency 2: Solutions.

Behavioral Objectives: In order to attain this competency, the student should be able to:

2.1 Calculate the concentration of solutions in molarity, molality, normality, mole fraction, or percent by mass and be able to interconvert between them.

2.2 List the colligative properties of solutions (freezing point depression, boiling point elevation, vapor pressure lowering and osmotic pressure) and perform calculations involving them.

Competency 3: Kinetics.

Behavioral Objectives: In order to attain this competency, the student should be able to:

3.1 Determine rate laws and order of a reaction from experimental data using the initial rates or graphical methods.

3.2 Use collision theory to explain the concept of activation energy and the effect of temperature on reaction rates and use the Arrhenius equation to calculate the activation energy.

3.3 Learn to use elementary steps to link the mechanism of a reaction to the rate law.

3.4 Explain how a catalyst affects a reaction.

Competency 4: Chemical Equilibrium.

Behavioral Objectives: In order to attain this competency, the student should be able to:

4.1 State and apply LeChatlelier's Principle to a reaction at equilibrium.

4.2 Calculate the value of an equilibrium constant from experimental data and use equilibrium constants to predict quantities of all species at equilibrium.

Competency 5: Acid-Base Equilibria.

Behavioral Objectives: In order to attain this competency, the student should be able to:

5.1 State and apply the Arrenhius, Bronsted-Lowry and Lewis acid-base theories to acid-base reactions.

5.2 Perform equilibrium calculations for pH, Ka and buffer systems.

Competency 6: Solubility and Complex Ion Equilibria.

Behavioral Objectives: In order to attain this competency, the student should be able to:

6.1 Explain the concept of solubility product constant, complex ion equilibrium, the common ion effect and write the Ksp and Keq expressions.

6.2 Calculate the molar solubility of a species and determine if a precipitate will form.

Competency 7: Thermodynamics.

Behavioral Objectives: In order to attain this competency, the student should be able to:

7.1 Discuss the fundamental laws of thermodynamics, free energy and entropy.

7.2 Perform thermodynamics calculations to predict the spontaneity of a chemical reaction and its equilibrium constant.

Competency 8: Electrochemistry.

Behavioral Objectives: In order to attain this competency, the student should be able to:

8.1 Discuss and apply the principles of electrochemistry including writing and balancing redox reactions.

8.2 Calculate cell potentials.

8.3 Calculate free energy and equilibrium constants from cell potentials.

CHE112L - General Chemistry II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE205 - Organic Chemistry I

Overview

Course Description
Study of carbon compounds with emphasis on structure, nomenclature, conformation, stereochemistry, synthetic methods and spectroscopy. Chemical reaction mechanisms are stressed throughout. Course is an integrated treatment of aliphatic and aromatic chemistry. Laboratory work emphasizes separation, purification, kinetic studies and identification of organic compounds stressing instrumental techniques (GC, IR, UV, NMR). Microscale technique is used in the laboratory.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHE112 General Chemistry II

Learning Objectives

Learning Objectives
1. Identify the general classes of organic compounds by their functional groups.

2. Know the basic reactions and mechanisms of aliphatic and aromatic hydrocarbons.

3. Name and draw structures for organic molecules.

4. Propose reasonable reaction mechanisms based on structure and reaction pathways of known reactions.

5. Know the stereochemical aspects of organic compounds and their reactions.

6. Demonstrate and use basic laboratory techniques and procedures for purification an analysis of organic molecules. (distillation, crystallization, purification, separation, extraction, etc.)

7. Know how to determine the order and rate of a reaction from kinetic data.

8. Know the principals defining Lewis acidity and basicity or organic compounds.

9. Draw and describe the concepts of resonance and hybridization in organic molecules.

10. Propose reaction pathways to prepare aliphatic and aromatic compounds and derivatives.

11. Know and demonstrate a knowledge of lab functions including safety, waste disposal, how to maintain a laboratory notebook.

CHE205L - Organic Chemistry I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE206 - Organic Chemistry II

Overview

Course Description
Continuation of CHE 205 with emphasis on mechanism, synthesis and organic molecules of biological interest. Synthesis, chemical literature, and the elucidation of organic reaction mechanisms, are explored in the laboratory. The laboratory uses microscale techniques.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHE205 Organic Chemistry I

Learning Objectives

Learning Objectives
1. Propose reactions to prepare substituted, oxidized or reduced aromatic and aliphatic organic compounds.
2. Assign reasonable structures for organic molecules based on the interpretation of spectroscopic data from nmr, IR and UV-vis.
3. Use IUPAC rule of nomenclature to name and draw organic molecules containing functional groups.
4. Know basic synthetic methods used in the laboratory to prepare organic molecules and methods to isolate and purify the products.
5. Verify the identity and purity of a synthetic product based on interpretation of spectroscopic data.

6. Know and demonstrate a knowledge of lab functions including safety, waste disposal, how to maintain a laboratory notebook.

CHE206L - Organic Chemistry II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE209 - Polymer Chemistry

Overview

Course Description
Polymer Chemistry, a lecture and discussion course appropriate for any science major and required for the chemical technology program, focuses on showing examples of the interdisciplinary nature of science through the broadly useful field of macromolecules. Topics from chemistry, physics, engineering, and mathematics are brought together in the course. An understanding of polymer nomenclature, structure/property relationships, characterization and testing methods, classification, analysis, composites, additives and fillers is developed. Examples emphasize commercial polymer technology throughout the course.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level

Corequisites
CHE206 Organic Chemistry II

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Recognize different types of polymer nomenclature and be able to apply rules for naming simple polymers and copolymers.	
2. Describe the general history of polymer science and the contributions of key scientists to the field.	
3. Know the basic relationships between polymer morphology and properties.	
4. Know chemical and physical tests to determine the structure and properties of a polymer.	
5. Know the structure and function of important naturally occurring polymers.	
6. Know the role of fillers, plasticizers and reinforcing agents in synthetic polymers.	
7. Describe advanced materials such as composites.	
8. Describe tests which define polymer rheology.	
9. Know how a polymer is processed from a base resin to a final fabricated article.	

CHE211 - Instr & Quantitative Analysis

Overview

Course Description

Instrumental and Quantitative Analysis I begins a two- semester sequence in the analysis of chemical samples appropriate for any science major, but specifically designed for the chemical technology program. The course focuses on the unchanging principles of analytical chemical methods. A theoretic and practical understanding of a broad range of modern chemical chemical methods and and instrumentation including statistical relevance; sample preparation; volumetric titrations; gravimetric analysis; and atomic absorption, emission, inductively-coupled plasma, fluorescence, and phosphorescence spectroscopies is achieved by lecture and laboratory experiences.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

CHE112 General Chemistry II, MAT150 Intro Probability & Statistics

Corequisites

CHE205 Organic Chemistry I

Learning Objectives

Learning Objectives

Emphasis is placed on the student understanding the basic tenet and modern methods of chemical analysis problem solving. Experimental and documentation techniques are developed and

refined. From the study of this course, the student should achieve the following general objectives:

1. Learn and demonstrate excellent laboratory writing skills. This is assessed via the grading of numerous well-written and complete laboratory reports. By the end of the course, these laboratory reports will include sections entitled purpose, procedure, observations and data, data analysis, error propagation, and results. All of these reports

are graded thoroughly. At least 2 of the laboratory reports for each student will go through a 2-step revision process.

2. Develop good experimental techniques of quantitative measurement and transfer. These techniques will be graded throughout the course by frequent and intensive interaction between the lab instructor and the students. The grading scheme includes a portion of the grade for this purpose.

3. Apply statistics to chemical analysis techniques to determine relevance of experimental data. Statistical analyses will be included in numerous graded laboratory reports throughout the course and will be included on exams.

4. Refine and practice graphical and computer-assisted data analysis techniques. This type of analysis will be employed by the student on numerous graded laboratory reports as well as on exams.

5. Understand the need and method to properly prepare chemical sample for analysis. The

student will show proper chemical sample preparation in numerous graded laboratory experiments. These experiments generally involve household or environmental substances for analysis. Proper sample preparation is key to the success of the graded experiment.

6. Develop and demonstrate concepts of standardization and calibration for modern scientific instrumentation. Calibration data is included in numerous graded laboratory experiments. Understanding of calibration and standardization theory is also checked on lecture exams and quizzes.

7. Discuss the challenges of signal-to-noise ratios and interferences and how these factors limit the precision of scientific measurements. These discussions will be graded via discussion questions on quizzes or exams as well as in the discussion of error propagation on graded laboratory reports.

8. Demonstrate strong cooperation in groups while doing science. Numerous labs will require students to work together on various portions of the same large project to accomplish individual goals that synthesize into a larger class-wide goal. The cooperative skills of each student are graded by the instructor on a weekly basis via careful observation during the laboratory sessions. This group contribution grade is explicitly part of the overall grading scheme. Students are made aware of this portion of their grade during the first class meeting.

9. Refine their understanding of chemical equilibrium as it relates to analytic methods. The theoretical topic of chemical equilibrium will form a significant portion of an exam score.

10. Demonstrate their refined techniques and broadened range of application of titrimetric methods including reduction / oxidation and chelating techniques.

11. Apply gravimetric analysis as both an analytic and sample-preparation tool

12. Thoroughly discuss the interaction of electricity and magnetism with chemical samples and how this interaction is useful in chemical analysis.

13. Develop a strong theoretic understanding of the basic tenants of spectroscopy. This understanding will be applied in spectroscopy experiments. Mastery of the concepts will be shown on quizzes and examinations as well as in the laboratory.

14. Communicate an understanding of fluorescence and phosphorescence and how these tools are useful to chemical analysis.

15. Understand the theoretical and experimental aspects of Atomic Absorption, Emission, and Inductive-Coupled Plasma spectroscopies. Students will confront and conquer problems incorporating these topics in graded laboratory experiments and in the lecture portion of the course.

CHE211L - Inst & Quantita Analysis I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE212 - Instru & Quantitative Analy II

Overview

Course Description
Instrumental and Quantitative Analysis II is the second semester sequence in analysis of chemical samples appropriate for any science major, but is specifically designed for the chemical technology program. The course focuses on the unchanging principles of analytical chemistry while indicating the range of applications of analytical chemical methods. A theoretic and practical understanding of a broad range of modern chemical methods and instrumentation including ultraviolet/ visible, infrared, NMR and spectroscopies; paper, thin layer, column, high performance liquid, gas and electroseparation chromatographies; and analytical electrochemistry is presented.

Total Credits

Total Credit Hours:
4

Billing Hours ⓘ

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHE212 Instru & Quantitative Analy II

Corequisites
CHE206 Organic Chemistry II

Learning Objectives

Learning Objectives
Emphasis is placed on the student understanding the basic tenets and modern methods of chemical analysis problem solving. Experimental and documentation techniques are developed and refined. From the study of this course, the student should achieve the following general objectives:

1. Continue to practice and show excellent scientific writing skills. This is assessed via the grading of numerous well-written and complete laboratory reports.

2. Develop, practice, and demonstrate excellent experimental techniques in quantitative measurement as it applies to the curriculum of quantitative and instrumental analysis. The grading scheme includes a line for this evaluation directly.

3. Present problem solving and individual and group learning skills throughout the course by student participation in experimental process development. Some laboratory experiments will require the student to design the experimental procedure to meet the purpose. The experiments will culminate into a graded laboratory report in which part of the grade evaluates the experimental design.

4. Apply statistics to chemical analysis techniques to determine relevance of experimental data in graded, written laboratory reports.

5. Show continued development of skill in graphical and computer-assisted data analysis techniques with increasingly complex data sets. This goal is assessed via graded laboratory reports and discussion questions on quizzes and exams.

6. Show mastery of the theoretical background of molecular electronic structure as it relates to ultraviolet/visible spectroscopy.

7. Discuss the range and applications of ultraviolet/visible spectroscopy.

8. Through experimentation, develop a practical understanding of a modern, commercial ultraviolet/visible spectrometer. This understanding culminates in a thorough laboratory report for an experiment that uses the instrument to accomplish a goal.

9. Explain why and how Fourier transform mathematical techniques are employed in modern spectroscopy to improve detection limits and reduce experimentation time.

10. Discuss theoretical and experimental aspects of infrared spectroscopy.

11. Discuss the advancement in the students' previous basic knowledge of theory and experiments in nuclear magnetic resonance spectroscopy to include the finer details of proton, carbon-13, multidimensional, and solid-state techniques.

12. Interpret details of NMR spectra of the aforementioned types and apply these details to molecular structure.

13. View a commercial NMR spectrometer while it is used to analyze student-prepared samples. Discuss this viewing and relate the viewed instrument to their understanding of NMR types and abilities.

14. Discuss the theory and practice of mass spectroscopy in modern chemical techniques.

15. Discuss the uses and limitations of mass spectroscopy.

16. Discuss other useful spectroscopies including microwave and photoelectron techniques.

17. Master the background of analytical separations and relate this background to practical experimentation in modern science.

18. Compare the use of traditional paper, thin-layer, and column chromatographies via experimentation. This experimentation will result in a laboratory report that emphasizes the benefits and limitations of these various techniques.

19. Show mastery of the theoretical and experimental aspects of high performance liquid chromatography and gas chromatography.

20. Demonstrate proficiency at high performance liquid chromatography and gas chromatography on modern commercial instruments in the laboratory.

21. Discuss the theory and practice of electroseparations such as electrophoresis.

22. Discuss the advantages of electrochemical methods and apply these methods to analyze various samples.

CHE212L - Instru & Quantit Analy II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CHE250 - Select Topic/Natural Science

Overview

Course Description
An interdisciplinary science course designed to introduce students to various topics within the natural sciences. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include the human genome project, string theory, stem cell research, history of science, endocrine disruption, global environmental issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as BIO/CHE/PHY 251.

Total Credits

Total Credit Hours:
1

Billing Hours ⓘ

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
BIO110 General Biology I, CHE111 General Chemistry I

CHE251 - Select Top/Natural Science II

Overview

Course Description
An interdisciplinary science course designed to introduce students to various topics within the natural sciences. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include human genome project, string theory, stem cell research, history of science, endocrine disruption, global environment issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as BIO/CHE/PHY 251.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
CHE250 Select Topic/Natural Science

CHE297 - Research at Lehigh University

Overview

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
3

Other Hours

Other Total Hours:
4

Requirements

Advisement Comments
This course is open only to students who have applied and been accepted to the RE@L Scholar program. Scheduling of the course will be on an individual basis.

Learning Objectives

Learning Objectives
Demonstrate knowledge of basic research and laboratory functions

Demonstrate proficiency in basic research laboratory techniques and procedures

Demonstrate proficiency in the operation of instrumentation relevant to the area of research

Use various software for data analysis relevant to the area of research

Communicate experimental findings to the scientific community in the form of a poster and presentation

CHN105 - Elementary Chinese I

Overview

Course Description
An introductory first course to the Mandarin Chinese language. It presupposes no prior knowledge of Mandarin Chinese. The course includes basic phonetic system of Chinese (Pinyin), basic character writing, sentence structure and Chinese culture. Students will learn to listen, speak, write and read at a beginning level.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Use Hanyu Pinyin, a system of romanization for Standard Mandarin pronunciation.
2. Express the Chinese language with correct accent and tones.
3. Differentiate 4 tones of basic phonetic system of Chinese.
4. Recognize basic Chinese characters.
5. Develop a beginning understanding of the Chinese writing system.
6. Identify the basic components of Chinese characters (basic Chinese radicals).
7. Demonstrate the use of Chinese basic strokes correctly.
8. Identify the number of strokes in a character accurately.
9. Write Chinese characters in correct stroke order.
10. Demonstrate the basic use of Chinese expressions in the classroom.
11. Apply basic survival expressions of the Chinese language.
12. State basic Chinese numerals.
13. Describe basic Chinese grammar and sentence structures.
14. Master the use of a set of essential sentence patterns.
15. Identify some Chinese cultures and society.
16. Recognize approximately 200 characters and phrases.
17. Demonstrate the ability to communicate with basic Chinese in common daily topics.

CHN106 - Elementary Chinese II

Overview

Course Description
A continuation of CHN 105, with concentration on the simplified character forms of the Mandarin Chinese language. The course includes a study of the Chinese phonetic system (Pinyin), character writing, sentence structure, and expanded knowledge of Chinese culture. Further acquisition of language skills in listening, speaking, reading, and writing will be emphasized.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHN105 Elementary Chinese I

Learning Objectives

Learning Objectives
1. Use Pinyin for standard Chinese pronunciation, and demonstrate correct accent and tones.
2. Derive meaning from the auditory context in Chinese.
3. Recognize, write, and interpret learned Chinese characters and phrases correctly.
4. Demonstrate the basic use of Chinese expressions in everyday language environment.
5. Use basic and standard expressions to convey basic needs in spoken and written Chinese.
6. Use correct vocabulary and expressions to describe events in spoken and written Chinese.
7. Interpret relatively more complicated texts written in the Chinese language.
8. Compose a diary and a letter in Chinese, using learned vocabulary and sentence structures.
9. Demonstrate the use of a Chinese dictionary.
10. Demonstrate the use of a computer to compose in Chinese.
11. Discuss the understanding of Chinese traditions, cultures, and norms.
12. Recognize and use approximately 250 more characters and phrases.

CHN205 - Intermediate Chinese I

Overview

Course Description
The course is the first semester of the second year of Chinese studies. It is a continuation of CHN 106, with concentration on the simplified character forms. The course includes a continuation review and refinement of Chinese phonetic system (Pinyin), and character writing skills. Students will further develop proficient abilities to read, understand, speak, and write sentences and texts, and expand their knowledge of Chinese culture.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Use Hanyu Pinyin with greater accuracy.
2. Demonstrate correct tones when expressing in Chinese.
3. Handle situations encountered in everyday life contexts.
4. Ask a variety of questions and respond accordingly.
5. Interpret relatively more complicated texts written in Chinese.
6. Use correct vocabulary and sentences to describe events in written Chinese.
7. Describe and explain Chinese traditions, cultures, and norms related to textbook topics.
8. Recognize and use about 250 additional characters and phrases.

CHN206 - Intermediate Chinese II

Overview

Course Description
This course is the second semester of intermediate Chinese studies. It is a continuation of CHN 205. The course aims to help students to achieve higher level of language proficiency. Students will further develop fluency in handling most daily conversation topics. Beside continuing enhancement in reading and listening comprehension, this course also offers students more opportunities to improve their speaking and writing abilities. Additionally, the course continues to expand the students knowledge of traditional and contemporary aspects of Chinese cultures.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHN205 Intermediate Chinese I

Learning Objectives

Learning Objectives

1. Demonstrate improved pronunciation and tones in Mandarin Chinese.
2. Ask a variety of questions and respond accordingly in conversations.
3. Understand and use appropriate phrases in contexts in speaking and writing.
4. Speak and write grammatically correct sentences using grammar points covered by the course.

5. Interpret relatively more complicated texts and articles.
6. Write short passages and narratives.
7. Describe and explain Chinese traditions, cultures, and norms related to textbook topics.
8. Recognize and use about 300 additional characters and phrases.

CIS105 - Introduction to Computers and Applications

Overview

Course Description
This course is designed to help students become effective, informed digital citizens who navigate the internet securely and who are prepared to do college-level work using appropriate technology. It is intended for students with little or no computer experience. The course is taught in a problem-based learning environment in which students explore technology and determine how best to apply it. Topics covered include security issues inherent in the use of technology, how software is created and used, and the traits of good cyber citizenship. Students will learn how to construct academic work using documents, spreadsheets, and presentations.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Explore technology, determine its usefulness, and apply it to realistic problems.	use current technology effectively
2. Describe security issues inherent in the use of technology and determine appropriate ways to prevent or mitigate vulnerabilities.	use current technology effectively
3. Construct documents, spreadsheets, and presentations with necessary features to support academic work.	use current technology effectively
4. Describe the origins of software, how it is created, and where it is used. Students will be introduced to programming logic.	N/A
5. Identify what the internet is comprised of and examine its uses and abuses. Students will be able to outline good cyber citizenship.	use current technology effectively

CIS110 - Business Information Systems

Overview

Course Description
Focuses on the value of information in organizations and investigates cost effective methods of the application of computerized software tools to personal and workgroup needs. The challenges of changing technology are considered along with strategies for change assessment and management. There is intensive hands-on work with Microsoft Office Software in labs. Particular emphasis is placed on the exchange and integration of electronic documents, spreadsheets, and databases. A team approach is used throughout the course as specific business case studies are presented that allow students to use the computer as a tool to solve the cases. Computer work is accomplished in a network environment.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications, BUS120 Intro to Business Organization

Advisement Comments
BUS 120 prereqs is waived for Networking majors.
All prereqs waived with appropriate industry experience.

Learning Objectives

Learning Objectives

1. Understand the need for information systems in organizations.
2. Identify the potential benefits and costs of information systems.
3. Identify the components of information systems.
4. Make decisions about the appropriate application of technology in a variety of situations as well as when the application of technology is not advisable.
5. Identify how information systems are developed.
6. Understand the impact information systems have at the personal, workgroup, and enterprise levels of an organization.
7. Encounter a situation, analyze the information needs, propose a possible solution and implement that solution using the software products discussed in this course and CIS 105.
8. Develop effective strategies to learn new software products efficiently.

CIS110L - Business Information Sys Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CIS111 - Electronic Commerce

Overview

Course Description
Examines the principles and practices used to develop successful Internet commerce applications for an organization. The students will be exposed to the strong market forces created by the convergence of the Internet and commerce.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
1. Define modern Electronic Commerce, identify its elements, and describe how it can be utilized for business-to-business and business-to-consumer transactions.
2. Identify the technological building blocks of Internet commerce.
3. Discuss primary design issues that have arisen with Internet commerce systems.
4. Analyze alternatives available to organizations to implement electronic commerce sites.
5. Identify the principles used to develop a secure, online, Internet commerce system.
6. Address tax, legal, and ethical issues involved in conducting business on the internet.
7. Discuss the technologies of transaction processing and payment systems as they relate to Internet commerce.
8. Discuss issues related to the completeness and integrity of the commerce application.

CIS112 - Computation Think & Prog Logic

Overview

Course Description
Computational thinking is the collection of skills that we use for problem solving that involves logical, algorithmic, and innnovative thinking. In this course, students will attempt to solve a variety of real-world problems using these methods of thinking. Computational thinking skills form the foundation of computer programming so, to apply these skills, programs will be developed in the course to develop simple computer-based games using game engine software thus translating human intelligence into computational artifacts.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Explain what computational thinking is and how it applies to everyday life.	N/A
2. Analyze the aspects of a problem and how it may be solved computationally.	N/A
3. Apply computational strategies to a variety of problem domains.	N/A
4. Determine computational solutions to problems using procedural, event-driven, and object-oriented solutions.	N/A
5. Apply computational strategies to develop computer-based games using game engine software.	N/A

CIS114 - Introduction to Game Design

Overview

Course Description

This course teaches the foundations of game design theory and also serves as a survey on the origins and progression of the video game field. In addition to learning about the history of electronic games, students will analyze games and game-play elements, examine genres and trends in games, formulate their own proposal for original games, and work to develop these games into non-digital, playable prototypes. The course will also give students hands-on experience with many games from earlier eras, and will encourage students to discuss the current state of the video game industry, as well as possible future developments. This course requires no knowledge of computer programming or computer graphics.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level

Advisement Comments

Intro Level Writing Placement or ENG 100 or ESL 251

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Define a game	Identify the various roles, genres, and historical influences within the game industry.
2. Describe the role of a game designer in game creation.	Identify the various roles, genres, and historical influences within the game industry.
3. Define, identify, and discuss formal and dramatic elements of games.	Identify the various roles, genres, and historical influences within the game industry. Design engaging mechanics and systems for game projects.
4. Define, identify, and discuss system elements of games and how they contribute to the overall experience.	Identify the various roles, genres, and historical influences within the game industry. Design engaging mechanics and systems for game projects.
5. Define and describe player experience and discuss how it impacts game design.	Identify the various roles, genres, and historical influences within the game industry.
6. Analyze and evaluate existing games based on effectiveness of overall design, balance, and fun.	Identify the various roles, genres, and historical influences within the game industry.
7. Analyze and discuss the current state of the game industry.	Identify the various roles, genres, and historical influences within the game industry.
8. Develop and execute a plan for a working game including formal, dramatic, and system elements with a focus on a particular player experience goal.	Design engaging mechanics and systems for game projects.
9. Build and playtest a working game.	Design engaging mechanics and systems for game projects.

CIS116 - Adobe Dreamweaver

Overview

Course Description

This course explores the use of Adobe Dreamweaver as a tool to design and create websites more efficiently and effectively. The various features of Dreamweaver will be used to create attractive web pages using Cascading Style Sheets (CSS) along with built-in elements including templates and widgets.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

CIS141 Client-Side Scripting I

Advisement Comments

Prereq waived with appropriate knowledge of HTML and CSS

Learning Objectives

Learning Objectives

1. Create, organize and manage websites using Dreamweaver.
2. Effectively interact with the Dreamweaver Integrated Development Environment (IDE).
3. Define site structure cascading style sheets (CSS) and Dreamweaver templates.
4. Create web pages using Dreamweaver's layout options and integrate media effectively.

CIS118 - Game & Simulation Program Fund

Overview

Course Description

This course teaches the fundamentals of 2D computer game and simulation development in the C# programming language and the Unity game engine. The course is taught as a learning community with ART 118.

Total Credits

Total Credit Hours:

3.5

Billing Hours

Billing Hours Min:

3.5

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

CIS112 Computation Think & Prog Logic

Corequisites

ART118 2D Game & Simulation Graphics

Advisement Comments

Course taught as a learning community with ART 118.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Explain and apply the processes used in C# and Unity to create 2D games.	
2. Using object-oriented techniques, develop an event-driven, single-player game.	
3. Learn to work collaboratively and effectively with team members to develop game projects.	Participate cooperatively within a team

CIS118L - 2D Game & Sim Graphics Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CIS119 - College Survival Bootcamp

Overview

Course Description
An orientation course on making a successful transition to college and the School of Communication Arts, Computers, and Technology. Topics include: study skills, time and financial management, netiquette, critical thinking, academic planning, goal setting, diversity, and campus resources.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Other Hours

Other Total Hours:
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Review skills for technical note taking	N/A
2. Manage time	N/A
3. Manage communications skills	N/A
4. Identify campus resources	N/A
5. Master critical thinking in the classroom	N/A
6. Acquire interpersonal skills	N/A
7. Develop team interpersonal skills	N/A

CIS133 - User Experience Design

Overview

Course Description
This course explores issues and concepts involved in designing effective user experiences (UX) involving human-computer interaction (HCI). Students will design user-centered interactions for a variety of computer-based software and hardware products primarily focused on personal, internet, and mobile computing platforms. Emphasis will be placed on designs for game and simulation environments. Best practices of information architecture and usability will be examined and applied through project work.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Explain the three factors that influence the user experience: the system, the user, and the context of use.	Design and program engaging user experiences in computer video games
2. Explain and apply the principles of usability engineering as they relate to software and hardware design.	Design and program engaging user experiences in computer video games
3. Examine and critique a variety of interface designs and plan improvements to them.	Design and program engaging user experiences in computer video games
4. Design user experiences given problem scenarios and case studies.	Design and program engaging user experiences in computer video games

CIS134 - Object-Oriented Programming with Python

Overview

Course Description
The Python language is used to teach programming concepts and problem-solving skills, without assuming any previous programming experience. Students learn how to design the logic of programs and then implement those programs using Python. Major topics include control structures, functions, arrays, pointers, objects and classes, and Graphical User Interfaces (GUIs).

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Use the technology vocabulary accurately	demonstrate effective communication skills.
2. Demonstrate knowledge of the constructs of object-oriented programming using Python	Construct secure networks and computer programs
3. Develop efficient algorithms for computer applications	Demonstrate high-level mathematical skills.
4. Demonstrate knowledge of the constructs of structured programming using Python	Construct secure networks and computer programs
5. Apply above constructs to the development of Python programs	Construct secure networks and computer programs

CIS141 - Client-Side Scripting I

Overview

Course Description

This course covers the basics of developing Web pages using HTML and JavaScript at a beginning to intermediate level. The material covered in this course is extended in CIS-142.

Total Credits

Total Credit Hours:

3.5

Billing Hours

Billing Hours Min:

3.5

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

To be able to create functioning Web Pages with the following features:

1. Create headings, paragraphs, and lines
2. Appropriately use color, fonts, and graphics
3. Storyboard a web site's design
4. Create links to other parts of a Web page, other pages, and other Internet objects
5. Create Web pages using tables
6. Create Web pages using frames
7. Create forms that contain buttons, checkboxes, radio buttons, and selection lists
8. Enhance web page functionality using; JavaScript variables, functions, calculation capabilities, conditional statements and loops.
9. Respond to user actions by scripting event handlers.

CIS141L - Client-Side Scripting I Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CIS142 - Client-Side Scripting II

Overview

Course Description
This course extends the basic concepts of client-side scripting covered in CIS 141. Topics covered include JavaScript, jQuery, and Cascading Style Sheets. Team-based project work is an integral part of the course.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
CIS141 Client-Side Scripting I

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Implement Cascading Style Sheets (CSS) to produce a consistent look and feel for a Web site.		
Apply the Document Object Model and scripting libraries (jQuery) to create attractive Web pages.		
Implement JavaScript arrays.		

CIS145 - Systems Analysis & Design

Overview

Course Description
Considers current methodologies used to analyze and design computerized solutions in workgroup and enterprise settings using a variety of tools with major emphasis on client/server technologies. Case tool and project management software will be used to allow students hands-on experience designing systems.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications

Advisement Comments
Prereq 105 waived with appropriate industry experience.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Design and implement computerized software solutions in workgroup and enterprise settings in a client/server environment with a primary focus on prepackaged software.		
Use popular CASE tools to design the solutions.		
Use popular prototyping tools to fine-tune the design.		
Work in teams to complete systems design projects.		

CIS155 - Intro Comp Sci-Struc Prog C++

Overview

Course Description
An algorithm design and structured programming course using C++. Covered will be elementary data types and data operations, functions and parameter passing, looping, selection, arrays, structures, file I/O, and string operations.

Total Credits

Total Credit Hours:
3.5

Billing Hours ⓘ

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Use primitive data types in a C++ program	PO 3	5
Compare and contrast characters, C-Strings and the string class as used in C++	PO 1	5
Select the correct control, decision, and loop statements in a C++ program	PO 1	5
Use functions in a C++ program	PO 3,5	5
Write structures and use them to create objects	PO 1,2	5
Write classes and use them to create objects	PO 1,2	5
Use arrays in a C++ program	PO 1,5	5
Use pointers in C++ programs and classes	PO 1,4	5

CIS155L - Intro Comp-Struc Prog C++ Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CIS165 - Data Structures

Overview

Course Description
This course is intended to extend the use of object-oriented programming introduced in CIS 155 with the concepts and usage of abstract data types. Covered in detail are: recursion, linked lists, stacks, queues, class relationships, algorithm efficiency, sorting, searching, trees, tables, priority queues, and graphs. The language used is C++.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS155 Intro Comp Sci-Struc Prog C++

Learning Objectives

Learning Objectives

- show an understanding of the process of software engineering
- distinguish between traditional structures and OOP structures and classes
- define and use stacks and queues
- use the C++ standard containers
- implement genericity through overloading and templates
- use recursion
- implement linked lists using pointers and through the STL
- form hash tables
- use doubly-linked lists
- define and implement a binary tree and a binary search tree
- define the algorithmic efficiency for various sorting schemes
- thread and balance a BST
- search and traverse digraphs

CIS165L - Data Structures Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CIS172 - Java I

Overview

Course Description
Teaches the student the base language, object-oriented programming, and the class libraries. Topics covered include language basics, object-based and object-oriented programming, applets, event handlers, and Swing. Class time allows students to practice writing and executing programs using concepts learned in lecture.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

- run Java applets
- run Java applications
- demonstrate command of repetition and selection statements
- demonstrate competence with all the Java operators
- construct program methods
- use the common math methods available in the Java API
- understand scope and parameter passing rules
- declare, initialize, and use arrays
- understand encapsulation
- use the **this** reference
- create new classes by inheriting from existing classes
- create superclasses and subclasses
- create and manipulate objects of the class **String**
- draw lines, rectangles, rectangles with rounded corners, ovals, arcs, and polygons
- manipulate colors and fonts
- copy areas of the screen
- understand paint modes
- understand the **java.awt** hierarchy
- build GUIs
- creat and manipulate labels, lists, text fields, text areas, and panels
- handle mouse and keyboard events
- use layout managers
- create and manipulate text areas, canvases, scrollbars, frames, menus, and dialog boxes

CIS180 - Introduction to Project Mgmt

Overview

Course Description

This course examines the principles and practices used to manage successful projects for an organization. The Project Management Institute's (PMI) framework is the foundation for the course. Concepts and techniques covered in the course are applicable to all majors including business, computer information systems, engineering, healthcare, and many others. Microsoft Project is the software used to automate project planning and analysis.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Apply project management tools and techniques to a variety of projects.		
Select projects based on a variety of techniques using commonly accepted methods including financial projections, weighted scoring, Problems, Opportunities, and Directives, etc.		
Initiate, plan, and execute projects using best practices techniques.		
Monitor, control, and close projects effectively.		
Learn to use Microsoft Project software to automate project planning and analysis.		

CIS181 - 3D Game & Simulation Program

Overview

Course Description

This course introduces students to game and simulation development in a 3D environment using a commerical game engine. Students will learn to manipulate 3D objects to implement gameplay mechanics. Game projects will be produced in partnership with digital arts students.

Total Credits

Total Credit Hours:

3.5

Billing Hours

Billing Hours Min:

3.5

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

CIS112 Computation Think & Prog Logic

Advisement Comments

Prereq waived with experience programming in any computer language.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Control the way 3D objects move in the game world.	N/A
2. Develop games using appropriate game rules and mechanics.	N/A
3. Work effectively in teams to develop game project deliverables.	N/A

CIS181L - 3D Gaming & Sim. Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lecture Hours
Lecture Hours (per week):
0

Lab Hours
Lab Hours (per week):
1.5

CIS207 - Unix Server-Side Scripting

Overview
Course Description
This course covers the basics of PHP server-side electronic commerce website developemnt. MySQL is used as a database for the course.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
CIS105 Intro to Comp & Applications, CIS141 Client-Side Scripting I, CIS255 The Database Environment

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Develop server-side programs in PHP.		
Create a simple electronic commerce web site that incorporates form data to provide dynamic content that interacts with a back-end database.		
Process form data in server-side applications.		

CIS209 - Comp Game/Simulation Prog

Overview

Course Description

This is a capstone course for the Computer Gaming and Simulation Program-Programming track. In this course, students will utilize the skills that they have developed in previous courses to create three dimensional game/simulation projects in a team-based environment. Students will participate in the design, production, and project management process while utilizing their programming skills to develop a computer game. This class is taught as a learning community with ART 209.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ART118 2D Game & Simulation Graphics, CIS118 Game & Simulation Program Fund, CIS133 User Experience Design, CIS155 Intro Comp Sci-Struc Prog C++, CIS180 Introduction to Project Mgmt

Advisement Comments

Course is being reinstated to allow students seeking graduation in specific degrees to complete their programming. Once the identified remaining student population has completed this course another review will be conducted to determine course status.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Apply the techniques and processes learned in previous courses that are used in game and simulation development to a capstone project.	
2. Play the role of programmer for a game created in a three-dimensional game engine.	
3. Develop a computer game project by working effectively using a team-based approach.	Participate Cooperatively within a team
4. Develop project deliverables in accordance with industry standards.	

CIS222 - Application Dev for Mobile Dev

Overview

Course Description

This course explores software development for the major platforms that make up mobility solutions with an emphasis on iPhone development. Interface design and programming approaches are considered. The unique development challenges these devices present, their capabilities, and their limitations are investigated. Students will develop applications using casual and serious games as subject matter.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

CIS105 Intro to Comp & Applications

Advisement Comments

Prereq waived with experience in application design and programming using an object-oriented language.

Learning Objectives

Learning Objectives

1. Describe the various devices that make up the mobile marketplace and understand the advantages and disadvantages of each.
2. Evaluate alternative approaches to creating a mobile device application.
3. Design appropriate and effective interfaces using industry accepted human interface design guidelines.
4. Design and develop a mobile device application that meets client requirements within a defined project timeline.

CIS225 - Computer Organization & Arch

Overview

Course Description

Examines the organization and architecture of computers from the perspective of a professional in the computer industry. The compatibility and integration of hardware and software systems are emphasized.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications

Advisement Comments
Prereq waived with appropriate industry experience.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe in detail the organization and architecture of a variety of computer systems, and the advantages and disadvantages of each		
List and describe cost/performance tradeoffs made in computer design.		
Describe processor and memory architectures used in current personal computer system designs.		
List hardware purchase acquisition issues and critically examine and evaluate sample system configurations.		
Understand digital logic (logic gates, flip-flops, circuits) and design a simple circuit using fundamental building blocks of circuit design.		

CIS226 - Adv Multimedia Design

Overview

Course Description
Students will utilize the tools presented in previous courses to further explore Computer-Generated Design concepts and creativity. The students will build complex web-based interactive interfaces and dynamic multimedia elements by utilizing the strengths of Adobe Photoshop and ImageReady. The students will design an extensive project that will serve as the premiere design for individual portfolios.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
0

CIS250 - Operating Systems

Overview

Course Description
Examines the role of the operating system with regard to computer hardware and software. Methods of memory processes, device and file management are explored on current operating system platforms.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Understand the purpose and role of an operating system and how it operates with the hardware	
2. Understand the components of an operating system	
3. Be able to evaluate and select an operating system for a given environment	
4. Demonstrate familiarity with UNIX/Linux, Windows 95, 98, NT, Windows 2000 Professional and Windows .NET Server operating systems. This should include, but is not limited to: · Installing operating system software · Customizing profiles and access permissions · Performing system administration tasks	

CIS255 - The Database Environment

Overview

Course Description
Examines the application of database management systems and development tools in personal, workgroup, and enterprise settings. Particular emphasis is placed on data modeling using the Entity-Relationship Model. Oracle is used for all lab projects.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Apply the various approaches of data modeling to database application development situations.		
Appreciate the issues surrounding data administration and security		
Work proficiently in SQL (Structured Query Language).		
Develop a simple database application using Oracle.		

CIS255L - The Database Environment Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CIS258 - Multimedia Practicum

Overview

Course Description
This course serves as the program's capstone. Students will be encouraged to focus on their strengths that they have developed throughout the duration of the program. The course allows the student to either focus on designing projects for real-world clients under the supervision of the program coordinator or secure an internship within the industry. The course will assist the student in preparing and presenting individual portfolios to potential clients/employers.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
Instructor approval required

CIS258L - Multimedia Practicum Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

CIS280 - Obj Oriented Prog Visual Basic

Overview

Course Description
The focus of this course is the programming language Visual Basic.NET. Students will develop applications using the language throughout the course and will be expected to complete many programming assignments using beginning through advanced level features of the language. Design issues in Graphical User Interface (GUI) will be considered throughout the course. Students must have experience in system design and database development to understand and complete the assignments but no prior knowledge of Visual Basic is required.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CIS105 Intro to Comp & Applications

Corequisites
CIS255 The Database Environment

Advisement Comments
Requisites waived with appropriate industry experience.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify user application needs and translate those into software using Visual Basic.NET	
2. Implement Windows standards regarding layout and labeling of controls	
3. Appropriately apply standard Visual Basic form and control properties and methods	
4. Develop applications in Visual Studio.NET containing the following coding structures and features: assignment statements, equations, selection and repetition structures, sub and function procedures, string manipulation, and arrays	
5. Develop programs that effectively and efficiently interact with the data access layer and bind data to controls	

CIS297 - Special Topics

Overview

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Lab Hours

Lab Hours (per week):
0

CIS297LC - Web-Based Multimedia II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
0

Other Hours

Other Total Hours:
0

CJA101 - Intro to Criminal Justice Sys

Overview

Course Description

CJA 101 is a comprehensive introductory review of the total criminal justice system. Introduction to the Criminal Justice System focuses on legal issues, criminological theories, legislative policy, and police, court, and correctional practices. Its emphasis is on the study of contemporary justice processes and systems. Interrelationships are stressed and problem areas are discussed, particularly with respect to the Supreme Court and Constitutional guarantees. We will examine and compare the theoretical concepts of the criminal justice system. Additionally, the course provides the student the opportunity to examine, in detail, the system we as a people have developed to control crime in our society.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVES	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Possess a comprehensive, practical view of criminal justice in the United States and develop a vocabulary and understanding of criminal justice terms and specialized jargon unique to the criminal justice system.	PO 1,2,3,4; CWC 1,2,4,5,6,7
2. Analyze the different types of law and their impact on the criminal justice system.	PO 1,2,3,4; CWC 1,2,4,5,6,7
3. Understand the evolution of policing and its influence on the contemporary organization of American law enforcement, and contemporary police issues, professionalism, ethics, and the protection of public v. due process rights.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9
4. Explain the concepts of the court process, courtroom workgroup, criminal trial, and rationale and forms of criminal sentencing.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9
5. Describe and understand the correctional system included institutions, community corrections, probation, parole, and intermediate sanctions.	PO 1,2,3,4; CWC 1,2,4,5,6,7

CJA104 - Intro Private Secur&Loss Cntrl

Overview

Course Description

This course provides an overview of the private security and loss prevention industry. The industrial, philosophical, and legal bases of security are examined. The role of security in industry, government, and society at large is explored. The principles of loss prevention are reviewed and critiqued. The course examines private security as it related to the criminal justice system and global environment.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Articulate the historical and theoretical foundation for security.	PO 1,2,3,4 / CWC 1,2,6,7
2. Compare and contrast public law enforcement with private policing.	PO 1,2,4 / CWC 1,2,5,6
3. Describe the goals of security management and the roles of security managers.	PO 1,2,4 / CWC 7,9
4. Describe the essential elements and different types of security organizations.	PO 1,2,4 / CWC 1,2,6,7,9
5. Evaluate professional certification, regulation of, and education programs for the security industry and its personnel.	PO 1,2,4 /CWC 1,2,6,7,9
6. Describe the impact of globalization on security services.	PO 1,2,3,4 / CWC 7,9

CJA105 - Criminal Investigations

Overview

Course Description
CJA 105 is a study of the principles of criminal investigation. The crime scene search, the interview and interrogation, and surveillance and records are explored in depth. The techniques used in special investigations, collection and preservation of evidence, and preparation for the police case in court are also discussed. This course includes the most basic aspects of criminal investigations. The importance of the uniformed officer's role will also be discussed in terms of the contribution he or she makes to the ultimate success of an investigation.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Develop a vocabulary and understanding of criminal justice terms unique to the science and/or art of criminal investigation.	PO 1,2,3,4; CWC 1,2,4,5,6,7
2. Describe and explain the techniques of a successful criminal investigation, including legal definitions, proper collection and legal significance of statements, evidence, and laboratory findings in general and related to specific criminal offenses.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9
3. Understand the procedures for successfully interacting with crime victims and the legal procedures for locating and arresting suspects.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9
4. Articulate the strategies for presenting a case to the prosecutor and the techniques, processes, and importance of testifying in court.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9

CJA106 - Intro to Homeland Security

Overview

Course Description

This course provides an overview of the governmental response to improve the security and safety of the United States. The course begins with the historic perspective of the threat of terrorism and concludes with a detailed description of the extraordinary legislative and organizational actions in support of preventing future terrorstic attacks.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Define and explain the concept of Homeland Security.	See grid
2. Analyze a historical perspective on the threat of terrorism.	See grid
3. Analyze the programs and actions being undertaken by government and the private sector to reduce or minimize terrorism.	See grid
4. Describe and explain the response in recovery efforts following a terroristic attack.	See grid

CJA116 - Corrections Administration

Overview

Course Description

This course is designed to provide a broad overview of correctional history, theory and problems, as well as an examination of the American correctional system including incarceration facilities, community corrections and juvenile detention and placement facilities. The physical institution and the function of all role players, including inmates, correctional staff, the government, and the community, within the institution and beyond are examined.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PRG OBJ #	*CWC #
Understand the historical background and evolution of correctional ideologies and social and cultural changes which bring about correctional reforms.	#3	#7
Identify and understand the various components of the correctional system at all levels of government and describe their functions and practices.	#1	#6
Describe and discuss the various participants and their roles within the correctional system and its impact on the criminal justice system.	#1	#2, 4, 7
Identify and critically analyze the philosophical arguments of various sentencing alternatives and their impact on society, up to an including the death penalty.	#1	#2,7, 9
Describe the major changes in the American corrections during the past few years.	#3	#1,7

CJA119 - Juvenile Justice

Overview

Course Description

The focus of this course is to introduce students to the juvenile justice system, its components and functions. Court processes, legal cases and legislative initiatives will be addressed. In addition to examining the evolution of the juvenile justice system and transformation of the juvenile court, students will gain an understanding of the current issues in the adjudication and treatment of juveniles in the United States.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Explain and discuss the evolution of the American juvenile justice system	See competency grids
2. Distinguish important legal, procedural and philosophical differences between the juvenile and adult criminal justice systems	See competency grids
3. Appraise juvenile crime in relation to total crime in the United States	See competency grids
4. Explain the various theories of delinquency and their policy implications.	See competency grids
5. Explain and discuss case law and legal initiatives relative to the juvenile justice system and related policy issues related to juvenile justice.	See competency grids

CJA201 - Crim Evidence & Court Proc

Overview

Course Description

This course examines the historical background, traditions, and the legal principles that underlie the courts as an integral component of the American system of Criminal Justice. The differences and similarities inherent within the state and federal court processes are analyzed and the procedures through which the criminal courts uphold the basic rights and liberties of all U.S. citizens, both victims and the accused, are explored. Primary focus is place upon understanding the roles of personnel in the criminal court process.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE
1. Outline the historical development of criminal evidence law and its role within the American criminal justice system.
2. Differentiate between direct and circumstantial evidence, and explain the use of inferences in determining guilt or innocence.
3. Examine the role of witnesses, including privileges, shield laws, and the significance of testimony in court proceedings.
4. Interpret the rules governing hearsay evidence, including exceptions and the Confrontation Clause, to assess admissibility.
5. Explore the exclusionary rule, including situations where it does not apply and the impact of police misconduct on evidence admissibility.
6. Analyze legal standards for obtaining confessions, physical evidence, and identification, including special procedures for searches and warrants.
7. Evaluate the chain of custody and the role of forensic evidence, including trace evidence, fingerprints, and scientific methods, in legal cases.

CJA214 - Multicultural Law Enforcement

Overview

Course Description
This course explores the impact of cultural diversity on communities and law enforcement agencies. It focuses specifically on communication, history, cultural and community specifics, and law enforcement contacts, and emphasizes the influences of culture, race, ethnicity, gender, and sexual orientation on relationships and interactions in the workplace and in the communities served by law enforcement. The course also discusses law enforcement responses to particular crime categories such as human trafficking, hate crimes, and racial profiling with specific consideration of multicultural factors.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CJA101 Intro to Criminal Justice Sys

Advisement Comments
Students should complete CJA101 prior to enrolling in this course to afford a general understanding of the criminal justice system.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Describe and summarize the history, interactions, and barriers of multicultural communication in law enforcement and its impact of the agency, recruitment, selection, and retention of personnel.	PO 1, 2, 3, and 4 CWC 1, 2, 4,5,6,7, 9
2. Identify and relate multicultural and community history, modern interactions, and concepts with law enforcement.	PO 1, 2, 3, and 4 CWC 1, 2, 4,5,6,7, 9
3. Outline and correlate the multicultural aspect of law enforcement response to specific crimes such as human trafficking, hate crimes, and racial profiling.	PO 1, 2, 3, and 4 CWC 1, 2, 4,5,6,7, 9

CJA215 - Law Enforcement & Society

Overview

Course Description
This course is an examination of the role of the police in society today and the concept of community policing. An emphasis will be placed on conflicts which develop internally and with intra agencies as the police accept responsibility for providing a wide variety of non-enforcement functions. The police officer's role in getting and maintaining public support is reviewed; also, the recognition and understanding of community problems, community action programs, methods of coping with crisis situations, ethnic and minority cultures, environments and police operations in relation to these.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

CJA225 - Probation and Parole

Overview
Course Description
Probation as a judicial process and parole as an executive function are examined. Innovative and progressive practice in federal, state and municipal systems are explored so that the student has a working knowledge of the theory and practice in such community-based programs as work- release, half-way houses, and contract program planning. The criminals' attitude toward society and the rehabilitive process are studied.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
CJA116 Corrections Administration

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Describe and analyze the important historical developments that led to the creation of probation and parole agencies and programs, a separate juvenile system, and their place in the system of criminal justice.	See competency grids
2. Describe and explain the rationales for probation, incarceration, and parole for juveniles and adults and identify and describe the major theories in the behavioral sciences, psychology and sociology, applicable to probation and parole practice.	See competency grids
3. Describe and discuss the major services of probation and parole agencies, including juvenile court intake, pre-sentence investigation, probation supervision, pre-parole reports, executive clemency, and parole supervision.	See competency grids
4. Identify and describe community corrections programs, including diversion, halfway houses, work-release, community dispute settlement, restitution, community service, special programs, and intermediate sanctions.	See competency grids
5. Identify and discuss the selection of probation and parole officers, the necessary personal qualities, educational and experience requirements, and the role of paraprofessionals and volunteers.	See competency grids
6. Examine and analyze the important issues and problems in juvenile and adult probation and research applied to these areas.	See competency grids

CJA232 - Stress Red. for Law Enf. Prof.

Overview

Course Description

This course examines every day and criminal justice work situations that can lead to stressors. An overview of the American Psychological Association DSM V conditions of acute stress disorder and Post-Traumatic Stress Disorder (PTSD) and long term effects will be explored. Students will learn stress reduction coping skills and techniques to lower general stress, acute traumatic situations and long-term stress.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

CJA101 Intro to Criminal Justice Sys

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Recognize situations in criminal justice that can cause an employee stress.	1, 2, 4	1,2,9
Diagnose stress-driven symptoms per the American Psychological Association DSM 5, such as acute stress disorder and PTSD.	4	1,2,6,9
Identify self-behaviors that signal high stress retention.	1,4	1,2,9
Utilize evidence-based activities and techniques to lower short-term and long-term stress.	1,4	1,2,5,6
Demonstrate the steps an individual can take if suffering from short-term and long-term stressors to alleviate the stress and stressful conditions.	1,2,4	1,2,5,6

CJA234 - Ethics in Criminal Justice

Overview

Course Description

This course explores the study of ethics, particularly as it applies to the field of criminal justice. Focus is placed on providing a basic framework for understanding morality and ethics, then applying those concepts to the development of critical thinking and decision making skills as they relate to the field of criminal justice.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

CJA101 Intro to Criminal Justice Sys

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Examine the role and purpose of ethics in criminal justice.	PO 1,2,3,4 CWC 1,2,4,5,6,7,9
2. Identify and apply the steps involved in ethical decision making.	PO 1,2,3,4 CWC 1,2,4,5,6,7,9
3. Assess a variety of moral/ethical concerns that arise within a study of the criminal justice system.	PO 1,2,3,4 CWC 1,2,4,5,6,7,9
4. Learn to think critically when making value decisions.	PO 1,2,3,4 CWC 1,2,4,5,6,7,9
5. Identify unethical behavior in the CJ system.	PO 1,2,3,4 CWC 1,2,4,5,6,7,9

CJA240 - Criminal Law

Overview

Course Description

CJA 240 is a study of criminal law offenses including legal interpretations of statutes, court decisions, and an analysis of legal process and procedure. The use of discretion and the trend toward increasing criminal and civil liability risks are studied. The course will present undergraduates with a thorough survey of the nature, purposes, principles, and doctrines of modern criminal law. The purpose of the course is to provoke thought about existing criminal law by presenting conflicting arguments about its purposes and principles and explaining the policies underlying various doctrines in the law.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Develop a vocabulary of new terms and an understanding of specialized jargon used by the legal profession.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9
2. Describe and discuss the origins and premises of Anglo American criminal law and articulate the nature, purposes, principles, and doctrines of modern criminal law.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9
3. Explain the policies underlying various doctrines in the law and provoke thought about existing criminal law by presenting conflicting arguments about its purposes and principles.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9
4. Compare and contrast criminal and civil liability and develop an understanding of the briefing of a case.	PO 1,2,3,4; CWC 1,2,4,5,6,7
5. Understand that the Constitution permits a balance to be maintained between individual liberties and the collective needs of the society; between personal freedoms and the need for public order; and the right to different lifestyles and the need for some degree of uniformity.	PO 1,2,3,4; CWC 1,2,4,5,6,7,9

CJA297E - Criminal Forensics

Overview

Course Description

This course provides a comprehensive introduction to the field of forensic science, emphasizing the techniques and methodologies used in crime scene investigation and evidence analysis. Students will explore the role of forensic scientists in the criminal justice system and develop proficiency in crime scene processing, evidence collection, and preservation methods.

Through a structured progression of topics, students will analyze various types of physical evidence, including hair and fibers, fingerprints, DNA, blood splatter, and toxicological substances. Hands-on activities and case studies will reinforce investigative techniques, including handwriting analysis, tool mark examination, and ballistics testing.

By the end of the course, students will be equipped with the foundational knowledge and skills necessary to evaluate forensic evidence critically and apply scientific principles to criminal investigations.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CJA105 Criminal Investigations

Learning Objectives

Learning Objectives
Describe the role of the forensic scientist and develop proficiency in crime scene investigation techniques, evidence collection, and preservation methods

Analyze hair and fiber evidence to establish connections between suspects and crime scenes.

Explore the role of botanical evidence at crime scenes and the characteristics of botanical evidence.

Master fingerprint identification and comparison techniques for individual identification and crime scene linking.

Investigate the principles and applications of DNA profiling in forensic investigations.

Examine blood and blood splatter patterns to reconstruct crime scenes and establish sequences of events.

Evaluate the significance of forensic toxicology in identifying drugs, poisons, and toxins in biological samples.

Analyze handwriting, forgery, and counterfeiting techniques to authenticate documents and signatures.

State the mechanisms, manners, and causes of death, including forensic anthropology's role in identification and trauma analysis.

CMN101 - Intro to Media Communications

Overview

Course Description
This course provides a basic understanding of the theories, events, and technologies that enable electronic media to impact society. Students become familiar with the concepts and terminology of the various media including photography, radio, film, television, gaming, and social media. Hands-on projects using the latest in communication technology and discussion of current issues will prepare students for career choices in these industries and provide them with media for their portfolio.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Explain the historical developments and technological advancements in electronic media.	N/A
2. Evaluate the effectiveness of these mediums through self-assessment of media literacy.	N/A
3. Analyze societal implications and economic influences of electronic and social media.	N/A
4. Discuss legal and ethical issues in electronic and social media.	N/A
5. Produce media content with emerging technologies.	Use current technology effectively

CMN105 - Interpersonal Communication

Overview

Course Description

Designed to provide a fuller understanding of the self and others through the study and practice of interpersonal skills. Topics will include but are not limited to verbal and nonverbal messages, perception, listening, conflict resolution, and intercultural communication.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Explain the principles of interpersonal communication and identify the major reasons for engaging in interpersonal communication.	CWC #7
2. Explain theories of relationship development.	CWC #8
3. Describe barriers to intercultural communication and explain the guidelines for communicating effectively in intercultural situations.	CWC #1
4. Explain how perception works, and identify the processes that influence perception.	CWC #8

CMN108 - Intro to Public Relations

Overview

Course Description

This course wil introduce students to the basic elements and principles of public relations. Students will learn to execute basic public relations research, develop a basic public relations plan, implement components of that plan and evaluate the results, and address crisis management. A variety of aspects of the field will be explored including ethics and legal considerations, measurement and assessment methods, and career possibilities.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Corequisites
ENG105 Research and Composition

Advisement Comments
Coreq: ENG 105

Learning Objectives

Learning Objectives

- Explain the role of public relations, and corresponding roles of public relations practitioners;
- Describe the different “publics” targetable by a public relations campaign, and apply the most effective strategies for reaching those publics;
- Identify ethics and professionalism in public relations;
- Analyze public relations strategies employed in case studies, and evaluate the level of effectiveness of those strategies;
- Develop a basic public relations campaign, and create the different components of a campaign, including writing a press release, developing media letters, and an evaluation tool.

CMN110 - Social Media Strategies

Overview

Course Description
This course is dedicated to exploring the new emerging technologies and mediums influencing business, marketing, public relations, and advertising practices and research. This course will acquaint students with practical knowledge and analytical skills necessary to create, evaluate, and execute social media and mobile campaigns. This course will also provide lectures, iconic and current case studies using social media and mobile, group and individual assignments, and engaged activities that will help students develop a strong social media skill set.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
Completion of CMN 101 Introduction to Media Communication and CMN 105 Interpersonal Communication are recommended prior to enrolling in this course; though not required.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Analyze the ethical, legal, and privacy issues of social media.	5	9
Demonstrate how to monitor, measure, and evaluate social media efforts.		2
Develop a basic social media strategy that includes written posts, appropriate visuals, and audience analysis.		2
Present insights and strategies related to social media implementation and best practices.	2	1

CMN112 - Oral Communica & Presentation

Overview

Course Description

Focuses on developing strong communication and presentation skills through practical application of speech communication theories in professional situations. Course content develops critical and creative thinking skills that focus on solving problems, building arguments, organizing presentations, and integrating technology. Students learn how to prepare and deliver a variety of clear, concise, and interesting professional presentations.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Corequisites

ENG105 Research and Composition

Advisement Comments

Coreq: ENG 105

Learning Objectives

Learning Objectives

- Describe the communication process and recall how channels influence the communication process
- Demonstrate conceptual understanding of communication skills associated with business and professional contexts.
- Recognize cultural differences that impact presentation styles and appreciate cultural diversity
- Evaluate listening habits and practice effective listening skills
- Explain the importance of audience and setting analysis
- Plan and conduct an interview in both interviewee and interviewer roles
- Demonstrate the communication and organization skills associated with presenting in a group and as an individual.
- Create and deliver an informative presentation, a sales pitch (persuasive), a group presentation, and a mediated presentation
- Integrate technology to effectively enhance a presentation
- Anticipate and respond to questions during a presentation

CMN113 - TV Studio Production

Overview

Course Description
This course provides students with a thorough understanding of the process of producing multi-camera television programs. Students work in teams as they rotate through various crew responsibilities and program formats. Emphasis is given to creative and technical processes and the ability to collaborate as an effective team.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Identify and analyze various multi-camera program formats.	N/A
2. Perform pre-production responsibilities, such as scriptwriting, storyboarding & marking scripts.	N/A
3. Execute basic technical procedures for various crew positions.	N/A
4. Collaborate with team members on group productions while effectively contributing as an individual team member.	Participate cooperatively within a team
5. Perform the roles and responsibilities of producer/director.	N/A

CMN115 - Argumentation & Debate

Overview

Course Description
Focuses on argument as communication. Students will examine fundamental principles of logic, evidence, and reasoning, as well as construction and effective presentation of arguments both in favor and in opposition to a proposition. Students will participate in Lincoln-Douglas and team debates.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Corequisites
ENG105 Research and Composition

Advisement Comments
Coreq: ENG 105

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. **Explain the role of argumentation as a form of communication in society**	
2. **Analyze and criticize arguments effectively**	
3. **Conduct research and organize support materials**	
4. Differentiate between facts and inferences	
5. Write effective fact, value, and policy statements	
6. Construct effective arguments without committing logical fallacies	
7. **Perform as an advocate and opponent in several debates**	

CMN118 - Media Scriptwriting

Overview

Course Description
Scriptwriting is used in radio, television, film, video, commercials, and corporate training presentations. Students will learn how to create effective scripts and storyboards for a variety of broadcast and media outlets.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Create acceptable radio and television commercial and public service announcements scripts.	N/A
2. Develop paradigms and treatments for screenplays.	N/A
3. Create pitches to present ideas.	Communicate effectively
4. Research and perform audience analysis.	N/A

CMN120 - Small Group Communication

Overview

Course Description

Designed to improve students' understanding of the principles of small group communication so that they may function more effectively in groups. This course will help students become familiar with major theories and research in group communication and allow students to improve their group communication skills through participation in small groups. Topics will include but are not limitied to: introduction to small group theory; problem solving and decision making; team building; communication climate; conflict management; roles, norms, status, and power; and leadership.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain theories and principles of group communication and apply them to a variety of group communication situations.		2
Demonstrate effective problem solving and decision making skills.		1
Identify appropriate ways to assume a leadership role.		
Demonstrate effective conflict management skills.		2
Analyze and evaluate small group communication.		2
Demonstrate how to effectively participate in a group project which involves goal setting, planning, and presenting an organized presentation.		2,4

CMN121 - Intro to Communication Theory

Overview

Course Description

Designed to provide an introduction to basic communications theories through study and application. This course integrates various areas of the discipline to provide an overview of communication topics including verbal and nonverbal messages, interpersonal communication, small group communication, interviewing, perception, listening, and intercultural communication.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Define communication, human communication, and categories and components of communication.
2. Identify the Psychological, Relational, Situational, Environmental, and Cultural Contexts of communication.
3. Explain perception and attribution theories.
4. Model active listening and apply listening skills to culture and gender situations.
5. Explain the general principles of attributing meaning.
6. Recognize the relationship between nonverbal and verbal communication and identifying their major characteristics.
7. Define the nonverbal channels and explain how culture influences the interpretation of nonverbal messages.
8. Describe barriers to intercultural communication and explain the guidelines for communicating effectively in intercultural situations.
9. Identify and explain the six-stage model of interpersonal relationships.
10. Explain theories of relationship development.
11. Identify relationship types, relational dimensions, and stages of relational development.
12. Explain theories of group process.
13. Explain information theory and principles.
14. Explain persuasion theory and principles.
15. Identify and describe descriptive and prescriptive theories of Organizational Communication.

CMN125 - Intro to Theatre Arts

Overview

Course Description

The class will introduce the student to various forms of theatre ranging from the Ancient Greek to the Contemporary forms of plays performed today. By reading as well as seeing actual productions the student will become aware of the importance the role of theatre has and does play in society. Through this study the student will become familiar with drama, theatre history, and theatre production. Further the student will engage in hands-on activities that familiarize them with the art of acting, directing, playwriting and stagecraft. This course will serve as a foundational anchor for the students to engage in and explore more advanced and specialized fields of the entertainment industry.This course will align itself with the requirements of most four year Theatre degree programs as to allow for the transfer credits.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. To have the student understand and see the purpose of theatre and its history.
2. Recognize the many aspects of theatre that are applied to produce a play.
3. Identify performance spaces and their use from the Greek theatre to how they are used today.
4. Define the production team and their responsibilities.
5. Produce projects that demonstrate mastery of basic phases of theatre such the creation of an ancient Greek character theatre mask, a standard theatre flat, and a completed piece ready for production.
6. Discover the relationship between the play and the audience.
7. Develop critical thinking skills.
8. Work collaboratively within a group to produce a product.
9. Attend at least one live performance of a play and write a detailed critique.
10. Watch at least two plays and write a detail critique of them.

CMN130 - Acting I

Overview

Course Description
This course will develop the basic acting class techniques used in theatre; Emphasis will focus on developing greater confidence before an audience and increasing a student's use of imagination, observation, and concentration. This course introduces techniques on how to develop and build a character. The student will engage in assignments that require specific acting exercises. These exercises will help the student master components such as, movement, voice, staging, and performance.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
The final project of this class requires that a student perform, at LCCC, a monologue or scene on stage in front of a live audience of classmates and/or external members.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Research information for critical analysis for use as background knowledge source material of dramatic literature	CSC 6. Apply Information Literacy Skills
2. Demonstrate while working collaboratively, team work, team building skills, and leadership attributes	CSC 4. Participate Cooperatively within a Team
3. Develop memorization skills	
4. Understand how to use listening and observation skills	CSC 7. Analyze Diversity
5. Recognize positive and negative aspects of a performance	
6. Apply self-discipline in dealing with the creative process	CSC 1. Think Critically
7. Engage in hands-on performance that focuses on several different forms of theatre	

CMN190 - Theatre Production

Overview

Course Description

This course is designed to expose students to requirements and conditions of being a dancer, actor, designer, choreographer or state-manager for faculty-approved theatre productions. Each ensemble member must agree to attend production rehearsals, technical rehearsals and ALL performances. The technical rehearsal schedule and Performance schedule is distributed at auditions.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Other Hours

Other Total Hours:

225

Requirements

Advisement Comments

This course is completed off-campus. The student will need to provide their own transportation for all rehearsals and performances.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Students will demonstrate an applied knowledge of a specific theatre production area through a unique and creative project presentation or research paper	n/a
2. Students will demonstrate knowledge of the process of artistic decision making in theatre through scholarly writing and oral presentation.	n/a
3. Students will demonstrate leadership through a self-directed and self- initiated theatre project	n/a
4. Students will communicate and defend the relationship between their original work or research and art and society.	2. Communicate effectively

CMN191 - Theatre Practicum

Overview

Course Description

This course is designed to introduce students to the backstage operations of a theatrical production. Theatrical productions include Theatre, Dance and Music. Technical terminology and techniques are discussed and employed in an experiential environment. Training is provided and the student utilizes the training during the technical rehearsals and public performances of the production. Positions include, but are not limited to: Master Electrician, Light Board Operator, Sound Board Operator, Assistant Stage Manager, Grip (Backstage crew), Wardrobe, Special Effects Operator and Projectionist.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Other Hours

Other Total Hours:

225

Requirements

Advisement Comments

This course is completed off-campus. The student will need to provide their own transportation for all rehearsals and performances.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Students will demonstrate an applied knowledge of a specific theatre production area through a unique and creative project presentation or research paper	n/a
2. Students will demonstrate knowledge of the process of artistic decision making in theatre through scholarly writing and oral presentation.	n/a
3. Students will demonstrate leadership through a self-directed and self- initiated theatre project	n/a
4. Students will communicate and defend the relationship between their original work or research and art and society.	2. Communicate effectively
5. Students will communicate and defend the impact of their creative contributions to a wider community.	2. Communicate effectively

CMN201 - Intercultural Communication

Overview

Course Description

In an era of rapid globalization, being able to communicate across cultures is imperative to our ability to function in a diverse workplace, city, and world. This course examines communication in the intercultural setting, both domestic and International. The course focuses on how culture influences the communication process and the development of relationships, and dynamics of intercultural encounters. Emphasis will be given to diversity in the workplace.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CMN105 Interpersonal Communication

Learning Objectives

Learning Objectives

- Demonstrate how communication processes differ among cultures;
- Identify challenges that arise from these differences in intercultural interactions, and develop ways to creatively address them;
- Recognize the roles of context and power in studying intercultural communication;
- Apply intercultural communication concepts/theories to personal experiences, social interactions/observations, and media representations of interactions involving members of different cultures;
- Describe their own cultural heritage/identities (using concepts learned in the course) and how these influence their communication; and
- Assess their own competence and character in relating with people of different cultures.

CMN204 - Video Field Production

Overview

Course Description
Textbooks and hands-on experience combine to offer an introduction to the theories, techniques and equipment used in video production for various digital media formats. Students explore the fundamentals of video production as they learn techniques in the complete production process. The emphasis is on single camera techniques and field production. Projects are designed for professional portfolio development and student/client interaction.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Work in a team environment during preproduction practices, such as, storyboarding and site surveys.	N/A
2. Utilize equipment in digital acquisition and production processes.	Use current technology effectively
3. Demonstrate application of the rules of composition.	N/A
4. Apply various lighting techniques during production.	N/A
5. Demonstrate knowledge of microphone selection, placement, and operation.	N/A

CMN205 - Intro to Video Editing

Overview

Course Description

Through hands-on experience, students learn both the creative theories and technical aspects of video editing. Principles of audio/video editing and digital processes are emphasized. Learn the foundations of video editing using Final Cut Pro software of LCCC's state-of-the-art Apple computer labs.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Analyze aesthetic audio and video principles in various types of visual media.	N/A
2. Demonstrate knowledge of foundational editing principles through hands-on experience.	Use current technology effectively
3. Demonstrate practical knowledge of use of sound in picture.	Use current technology effectively
4. Utilize toolsets to enhance and stylize audio and video.	N/A

CMN225 - Journalism

Overview

Course Description

The course is designed to prepare students for the ever-changing roles journalists now fill. Most reporters are asked to write, take photos, shoot video, and post items to the Internet on a daily basis. With a focus on good journalistic reporting and storytelling, students will learn how to prepare news, feature, profile and editorial stories for a variety of multimedia formats, including: print and online editions of LCCC's student newspaper "The Paw Print", online blogs, photojournalism, videos, and audio sound bites.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Clarify ethical decision-making and responsibility and employ ethical practices associated with journalism.	Think critically. Evaluate ethical aspects of decision-making.
2. Master the conceptualization, production and publication of multimedia journalism through producing stories for print and online publication.	Communicate effectively. Use current technology effectively. Apply information literacy skills.
3. Analyze, critique and provide feedback while working in a collaborative environment.	Participate cooperatively within a team.
4. Evaluate modern journalism for message effectiveness and appropriate audience.	Analyze human diversity. Apply information literacy skills.

CMN230 - Newspaper Production

Overview

Course Description

This course will provide practical application of jounalistic techniques through preparation of the online college newspaper, The Paw Print. The course will emphasize both the practical application and critical thinking skills needed for the devemopment of a newspaper. The students--limited to two, who will serve as co-editors of the newspaper--will learn journalistic standards, editing, proofreading, typographical selection, headline writing, design, graphics, advertising and promotional campaigns, and overall newpaper production supervision.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

1

Other Hours

Other Total Hours:

10

Requirements

Prerequisites

ENG225 Journalism

Advisement Comments

150 hours newspaper editing, proof, production

Learning Objectives

Learning Objectives

- Demonstrate knowledge of, an appreciation of, and a critical awareness of the processes used in the production of a college newspaper;
- Articulate elements of newspaper design, headline and cutline writing, photo selection, and page layout;
- Develop story ideas, assign and edit stories for content using Associated Press style; and supervise advertising efforts;

- Recognize libel and ethical issues as they apply to newspaper production;
- Analyze the essential elements of a college newspaper story, including news, feature, sports and editorial sections.

CON102 - Framing Construction Tech

Overview

Course Description
Provides the students with knowledge of materials, equipment, and procedures necessary for residential and light commercial structures. The students will be involved in specifying materials and construction procedures for a basic framed construction project. Also covers the importance of utilizing the proper equipment and tooling for the various types of framing projects.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
3

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Select proper materials for each phase of a construction project.		
Construct a structure with proper floor, wall, and roof framing techniques.		
Install wall-covering material.		
Demonstrate safe work habits with tools and equipment.		
Identify different types of framing.		
Identify load and non-load bearing wall systems.		
Work in a team environment.		

CON102L - Framing Const. Tech Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CON103 - Interior/Exterior Finishing

Overview

Course Description
Provides the students with knowledge of how to finish the interior and exterior of residential and light commercial structures. The students will be exposed to a variey of materials commonly used in finish construction as well as the proper procedure for installation. Requires students to demonstrate several techniques studied on a building project.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Calculate and install any of the finish interior or exterior wall coverings discussed in this course.		
Calculate and install ceiling materials discussed in this course.		
Calculate and install flooring materials that were discussed in this course.		
Construct a stair unit for an elevated structure or platform.		
Select standard doors and windows from manufacturers' catalogs.		
Utilize time management for efficiency.		
Utilize safe working habits.		

CON103L - Interior/Exterior Finish Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CON104 - Concrete/Masonry Principles

Overview

Course Description
Provides students with knowledge of concrete and masonry used in the building industry. Types of materials and their applications. Structural and ornamental type masonry materials. Footing foundation, and fireplaces will also be explained.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Prepare a worksite for concrete or masonry installation.		
Install concrete and masonry with standard mason's tools.		
List the components that make up concrete.		
Understand the purpose of footings, foundations, supports, columns, and lintels.		
Demonstrate how to form an area for concrete.		
Demonstrate finishing operations for concrete.		

CON105 - Architectural Computer Appl

Overview

Course Description
Provides the students with the use of the microcomputer for applications. Various computer architectural software packages will be utilized throughout this course to illustrate the benefits of computer-aided designing.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Create layouts and elevations.		
Insert blocks from software libraries.		
Edit blocks for customization.		
Print or plot drawings.		
Design a deck design.		

CON201 - Basic Surveying

Overview

Course Description
Provides students with a foundation in surveying techniques and related equipment necessary for a construciton site layout. Topics covered will be surveying concepts relating to layout, measurement, and computations. Also included will be the proper usage of both traditional and modern surveying instruments, and the field procedures necessary for a layout.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT130 Industrial Mathematics

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate the mathematical calculations and conversions necessary for an accurate survey.		
Setup and take readings to be translated back to a civil designer or engineer.		
Demonstrate the procedure for taping and staking.		
Demonstrate reading the vernier scale on the transit.		
Read and interpret a subdivision plan.		

CON202 - Construction Estimating

Overview

Course Description
Provides the students with knowledge of building construction estimating. Material take-off sheets and cost analysis will be developed for accuracy in a construction project. An introduction to the bidding process and subcontracting. Students will be exposed to regulatory issues such as contracts, insurance, and building codes.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Acquire costs included in a building project for equipment.		
Produce a cost estimate for a construction project.		
Specify specialty equipment for site preparation and construction.		
Specify proper materials and costing for masonry.		
Develop cost estimates for finish work.		
Prepare a formal bid sheet for a construction project.		

CON204 - Construction Codes & Specifica

Overview

Course Description
This course will introduce the principles of how to read and interpret the International Residence Code (IRC) Book as well as to be able to apply these standards to construction drawings and real world situations. Students will learn these code standards and specifications through the written guidelines, tabulated data, and charts found throughout IRC Code Book. The major areas of concentration will be site work, foundations, rough framing, and final building structure inspection.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify the correct section and specification to be able to make judgement on conformity.		
Identify what aspects of construction require permits and required inspections.		
Interpret common building code terminology.		
Identify specific duties of building code enforcement officers.		
Explain the data found in the charts and graphs included throughout the International Residence Code Book.		
Explain safety practices and procedures.		

CON210 - Construction Practicum

Overview

Course Description
Provides the students an actual personal experience in the construction field by working through a construction project. Students will work from initial stages of construction through to finished construction. Also included will be drawings, costing, purchasing, and billing. Projects must be approved by instructor.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
3

Requirements

Prerequisites
CON102 Framing Construction Tech

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Analyze the steps and time sequence for completion.		
Prepare cost estimate.		
Select equipment necessary for construction.		
Apply safety considerations to all phases of project.		

CON210L - Construction Practicum Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

CON220 - Construction Management

Overview

Course Description
Provides the students with knowledge necessary for managing or operating an effective constructive team. Introduces topics relating to construction such as employees, documentation, specifications, labor relations, and safety.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CON202 Construction Estimating

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Design an organizational chart.		
Keep accurate construction reports.		
Read and interpret local building codes.		
Conduct a construction meeting.		
Explain the procedure of bidding a construction project.		

DMP115 - Principles of Sound Production

Overview

Course Description
An introduction to the principles of sound and audio technology, this course presents an overview of the production process. Students wil learn basic concepts and theories through listening exercises and practical experience. Evaluation and production for radio, and audio in media is emphasized.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
A. Apply concepts and principles of sound.

B. Demonstrate analytical and critical listening skills.

C. Demonstrate a practical knowledge of signal flow and processing.

D. Select appropriate microphones and miking techniques for various media productions.

E. Explain basic operations of a mixing console and other industry equipment.

F. Compare and contrast audio usage in various mediums.

G. Discuss the opportunities available in audio.

DMP116 - Sound Design for Animation

Overview

Course Description

This course examines the core principles of sound, which serves as an introduction to sound recording, sound design, and audio editing. Students will learn basic concepts and theories of audio, through practical examples and hands-on demonstrations, with a focus on applying those concepts toward mixing audio for use with animation and other time-based media. Students will utilize industry-standard hardware and software to produce sound-based projects to both develop skills and for use in portfolios.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Understand and apply the concepts and principles of sound
2. Exhibit analytical and critical listening skills
3. Sample and trim existing audio and record custom Foley, voice, and sound effects for use in animation
4. Recognize waveform properties, including amplitude, frequency, wavelength and their relation to pitch, reverberation, and other perceived and alterable sound effects
5. Mix properties of audio including volume, timing, and positional effects
6. Sync audio to animated segments in various media

DMP216 - Digital Audio Production

Overview

Course Description

Students build upon concepts presented in DMP 115 as they learn the fundamental principles of digital audio through hands-on experience. Emphasis is on recording and MIDI concepts. Students utilize industry standard equipment and software, performing basic operations on both the Mac and PC platforms.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

DMP115 Principles of Sound Production

Learning Objectives

Learning Objectives

A. Apply concepts and principles of digital audio.

B. Demonstrate the ability to set up and operate equipment used in audio recording, playback, processing and editing.

C. Record quality dialog, voice-overs and affects both in the field and studio environments.

D. Utilize industry standard software.

E. Demonstrate knowledge of software interface and basic editing techniques.

DMP225 - Audio Post-Production

Overview

Course Description

Building upon skills learned in DMP 216, students advance their skills in editing and multi-track mixing. Mixing philosophies for various mediums are explored. Students utilize industry standard software to further experiment with signal processing. Multiple sound tracks with dialog, music, and effects are created, mixed, mastered and output to a range of delivery formats.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2.5

Lab Hours

Lab Hours (per week):

1.5

Requirements

Prerequisites

DMP216 Digital Audio Production

Learning Objectives

Learning Objectives

A. Describe philosophies of mixing.

B. Prepare for a mixing session.

C. Record replacement dialog and effects.

D. Incorporate music and sound effects into projects.

E. Utilize equalizers and filters.

F. Apply dynamics controls.

G. Create and enhance acoustic space.

H. Perform mixing and post-mixing techniques.

I. Master projects to various delivery formats

DMP250 - Communications Media Practicum

Overview

Course Description
The internship provides the student an opportunity to apply skills and knowledge acquired in the classroom to an actual work environment. This supervised experience includes observation, hands-on opportunities, and written analysis of the internship. Internships may be done at approved broadcast or media related facilities. Students will spend 50 hours per credit, including an occasional meeting with the instructor. An additional three credits (150 hours) must be taken as either an internship, practicum or independent study.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Other Hours

Other Total Hours:
225

Requirements

Prerequisites
CMN113 TV Studio Production

Advisement Comments
Prereq: CMN 113 or DMP 216

Learning Objectives

Learning Objectives
A. produce items created for his/her student portfolio.

B. identify and describe career opportunities/possibilities within the student's field of internship.

C. participate in the varied activities in a broadcast station or media production facility.

D. analyze the internal structure of a broadcast station or media production facility.

E. perform effectively as a "generalist" within the internship setting.

F. successfully perform at depth in at least one related area of specialization.

G. demonstrate proficiency in evaluating their own and other's responsibilities and work habits.

H. function effectively as a manager if the internship was taken at WXLV.

I. qualify for employment in related industry.

ECE110 - Fund of Early Child Educ

Overview

Course Description
Course offers an analysis of Early Childhood Education through historical, theoretical, current, and future perspectives. Discussion of principles of curriculum models, key theorists, current teaching trends and best practices is included. Emphasis will be on professional organizations, environments, cultural diversity, families, and community resources.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Corequisites
EDU114 Careers in Education

Advisement Comments
This course contains 4- hour in class observations. Students must obtain clearances and have them submitted prior to engaging in observation. EDU 114 corequisite.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate an understanding of the early childhood profession, its historical, philosophical and social foundations, and how these foundations influence current thought and practice.	6	2	6
Support the uniqueness of each child, recognizing that children are best understood in the context of family, culture and society.	2	1	7
Describe the principles of curriculum models, including the Montessori Method, High Scope, Head Start, Waldorf and Reggio Emilia.	5	3	1
Describe the influence of many philosophers and educators including Bronfenbrenner, Piaget, Vygotsky, Gardner, Erikson, Maslow, Gesell and Skinner.	6	3	1
Identify principles of Developmentally Appropriate Practice, Pa Early Learning and NAEYC standards.	5	3	6
Observe and evaluate one early childhood education program (Montessori, Head Start, kindergarten, preschool, infant/toddler or school-age program).	3	2	9
Research and present information on family structure and current impact on education of children.	2	5	6

ECE120 - Child Growth & Development.

Overview

Course Description
Course introduces principles and theories of child development and sequence of developmental domains in children aged birth through 9 years. Course also accents the impact of health, safety and nutrition on early childhood development. State licensing, developmentally appropriate practices, Department of Public Welfare regulations, PA Early Learning and NAEYC Standards are presented.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
8

Requirements

Corequisites
EDU114 Careers in Education

Advisement Comments
This course contains 8- hour in class observations. Students must obtain clearances and have them submitted prior to engaging in observation. EDU 114 corequisite.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the patterns of change and stages of development for children birth through age nine in all domain areas.	1	1	6
Apply concepts of human development to education and learning settings.	1	3	6
Demonstrate knowledge of and competence in understanding social and culturally diverse characteristics of children ages birth through age nine.	1	2	2
Identify interacting social influences on children's development and learning and families.	2	5	7
Plan and implement learning opportunities to support culture and linguistically appropriate strategies based on student's age and stage of development.	4	2	1
Describe pre and post natal effects on young children from family, media, cultural and language influences.	2	1	6
Demonstrate knowledge of DHS regulations regarding health, safety and nutrition.	6	2	1
Describe the theories of major theorists including Piaget, Erikson, Skinner, Maslow, Gardner and Vygotsky.	1	3	6
Identify principles of Developmentally Appropriate Practice, Pa Early Learning and NAEYC standards.	6	3	6

ECE125 - Educ & Care of Infants & Todd

Overview

Course Description
This course introduces program planning to meet the specific developmental needs of infants and toddlers. The course incorporates research-based best practices, learning environments, the importance of play, health, safety and nutrition for children ages birth through 3 years. Department of Public Welfare regulations, PA Early Learning and NAEYC standards, and developmentally appropriate practices for infants and toddlers are presented.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
8

Requirements

Corequisites
EDU114 Careers in Education

Advisement Comments
This course contains 8- hour in class observations. Students must obtain clearances and have them submitted prior to engaging in observation. EDU 114 corequisite.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify developmental milestones and growth patterns in all domain areas for children aged birth through three years.	1	1	6
Plan and implement developmentally appropriate experiences to enhance social, physical, emotional, and cognitive development for each age group.	4	2	1
Demonstrate knowledge of DHS regulations, PA Early Learning and NAEYC standards, and DAP principles regarding health, safety, and nutrition.	6	3	6
Describe the stage criteria of major theorists including Piaget, Erikson, Maslow, Vygotsky, Gardner and Skinner.	1	3	6
Describe pre and post natal effects on young children from family, media, cultural and language influences.	2	1	6
Demonstrate the ability to develop and implement materials to support individual children through infant and toddler curriculum.	5	3	6
Assess the quality of an infant or toddler environment using the ITERS rating scale.	1	2	1

ECE130 - Integ Arts/Play in Early Child

Overview

Course Description
Course reviews theories related to the stages of child development in play and the creative arts. Strategies for developing and implementing learning opportunities in visual art, creative drama, music, movement, social studies and play are presented. Course focuses on writing instructional objectives and implementing lesson plans based on children's developmental skills. Department of Public Welfare regulations, PA Early Learning and NAEYC Standards are presented.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
20

Requirements

Advisement Comments
This course contains 20 hours in class fieldwork. Students must obtain clearances and have them submitted prior to engaging in observation. EDU 114 and ECE prerequisite or corequisite.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Plan, implement, supervise and evaluate developmentally appropriate learning opportunities for young children at play in art, music, movement, social studies and cooking.	5	6	6
Demonstrate a proficiency in writing lesson plans and objectives.	5	2	6
Design learning centers to allow children to explore elements and principles for art, music, technology, movement and social studies.	5	2	1
Construct a developmentally appropriate activity portfolio reflecting knowledge of a variety of program areas.	5	3	2
Analyze an early childhood classroom based on the ECCERS preschool assessment tool.	3	2	1
Identify the role of and value of play and games in child development for children ages birth through age nine.	1	3	7
Identify common themes, principles and concepts in the arts.	5	3	1
Describe strategies that help children engage in new movement activities and skills and support opportunities for performance feedback.	5	2	1

ECE140 - Observation & Recording Tech

Overview

Course Description
Course highlights goals, benefits, and techniques of systematic observation of children and their families in natural settings. Students utilize assessment strategies and documentation, including The OUNCE Scale and the Work Sampling System, to create child portfolios and to develop program planning based on observed strengths and needs of all children.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
14

Requirements

Advisement Comments
This course contains 14 hours in class fieldwork. Students must obtain clearances and have submitted prior to engaging in observation. EDU 114 and ECE 110 as a prerequisite or corequisite.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Articulate the goals and benefits of observation and assessment of individual children and entire classrooms.	3	2	2
Demonstrate knowledge of responsible, objective, appropriate versus inappropriate assessment techniques and of biases of children from linguistically or culturally diverse families.	2	4	6
Identify and use a variety of assessment tools (including informal and formal assessment tools, work samplings, the OUNCE Scale, checklists, technology, and child portfolios) that are based on authentic observation in classroom environments.	3	3	6
Describe how assessment can improve teaching strategies, effectiveness of curriculum planning, and partnerships with families.	5	3	2
Using a child portfolio, assess children's skills in each developmental domain that need strengthening and design individualized next step curriculum webs.	1	1	6

ECE205 - Creative Teach w/ Makerspaces

Overview

Course Description

Course explores the exciting realm of STEAM (Science, Technology, Engineering, Arts, and Math) education in early childhood classrooms with an emphasis on Makerspace integration. This course is designed to equip educators with the skills needed to infuse math and science concepts into their teaching while harnessing the creative potential of Makerspace activities and 21st Century Learning. Students will have hands on opportunities to design engaging and developmentally appropriate experiences that spark curiosity and exploration in young minds based on PA Early Learning, NAEYC, NCTM, and NSEC Standards.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ECE110 Fund of Early Child Educ

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Plan and implement math and science learning opportunities for children utilizing an integrated, play-based curriculum.	5	2	6
Develop and assess curriculum that is based on the PA Early Learning, NAEYC and the National Math and Science Standards.	5	3	6
Plan and implement appropriate learning opportunities that support the development of child mathematical outcomes in the following areas: 1) Number and Operations, 2) Algebra 3) Geometry and Spatial Sense and 4) Patterns and Measurement.	5	3	6
Plan and implement appropriate learning opportunities that support the development of child scientific outcomes in the following areas 1) Scientific Skills and Methods, 2) Scientific Knowledge, 3) Physical Sciences 4) Life Sciences and 5) Earth and Space Sciences.	5	3	6
Demonstrate appropriate individual child assessment methods in math and science learning.	3	1	1
Intentionally design and implement math and science learning centers for indoor and outdoor classroom environments.	5	2	1

ECE210 - Integ Curr in Early Child

Overview

Course Description

Course introduces effective approaches to teachng mathematics and science in early childhood education. Students learn techniques based on PA, NAEYC, and NCTM Standards to teach mathematical concepts, scientific process, problem-solving and reasoning, discovery, data gathering and measurement through active manipulation of real objects. In this advanced curriculum course, students design a balanced curriculum that incorporates emergent curriculum and the project approach to create developmentally appropriate units of study.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Other Hours

Other Total Hours:

24

Requirements

Advisement Comments

This course contains 24 hours in class fieldwork. Students must obtain clearances and have them submitted prior to engaging in observation. EDU 114, ECE 110, 120, 130 and 140 are prerequisites.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Design curriculum that connects to professional standards, is challenging, developmentally and culturally appropriate, and incorporates planning for individual differences.	5	3	6
Develop curriculum materials and plan classroom environments that immerse children in a topic of study, promote positive development, and afford opportunities to gain new competencies.	4	2	1
Discuss, compare and critique curriculum approaches including Developmentally Appropriate Practice, emergent curriculum, thematic curriculum, and the project approach.	5	3	1
Plan daily schedules for various age groups and settings that incorporate developmentally appropriate practices and allow extended time for play-based experiences and constructivism.	6	2	2
Develop, implement, assess and modify learning experiences that enhance children's interest in mathematics and science (including cooking), and make connections between these subjects and other subject areas	5	2	2

ECE215 - Language and Literacy

Overview

Course Description

Course examines theories, current research and practice in language and literacy development for children aged birth to 5 years. Students develop competencies in designing print-rich environments and supporting foundations for learning to read and write. Students demonstrate strategies for creating effective language and literacy learning opportunities based on PA Early Learning and NAEYC Standards.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Other Hours

Other Total Hours:

10

Requirements

Prerequisites

ECE110 Fund of Early Child Educ

Advisement Comments

This course contains 10 hours in class fieldwork. Students must obtain clearances and submit them prior to engaging in observation. EDU 114 prerequisite.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Examine experiences and curriculum materials children ages birth through age nine, need to develop literacy skills and success in school settings.	5	3	1
Analyze the range of development skills for all children ages birth through nine in the following areas of language: receptive and expressive vocabulary, auditory comprehension and pragmatic language skills.	1	1	1
Plan, implement, assess and modify curriculum for language comprehension and expression skills in children ages birth through nine years.	5	3	6
Plan and implement learning opportunities for young children to develop spoken language skills, support emergent literacy skills and phonological development.	5	3	6
Identify the influences of parent/adult-child interactions with print materials and children's literature.	4	4	1
Plan and implement strategies for using tactile-kinesthetic and auditory cues in literacy development.	5	3	6
Identify sources of research based knowledge in language and literacy development for children ages birth through nine.	1	3	6
Articulate the various styles of authors and illustrators in children's literature.	5	2	1
Evaluate and assess literacy rich environment to promote all elements of language development based on the ELLCO tool.	6	2	1

ECE218 - Communities and Families

Overview

Course Description

This course introduces students to the complex dynamic of the child, family, and community on the early learning profession. Through the Center for the Study of Social Policy Protective Factors Framework, student will explore how to utilize the framework in their own teaching practice to connect with families. The course will provide foundational skills in working with diverse families and communities. Students will discover community resources to cultivate support systems for all families and children in their learning environment.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ECE110 Fund of Early Child Educ, ECE120 Child Growth & Development.

Advisement Comments

Prereq alternative: ECE 120 or ECE 125

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define family cultures and analyze resources applicable to meeting the family's needs.	2	2	7
Demonstrate working knowledge of the Strengthening Families Protective Framework as it pertains to current practice in early childhood education.	2	2	9
Develop knowledge of reciprocal communication with families through culturally responsive engagement.	2	2	2
Build knowledge of high quality and developmentally appropriate community resources.	2	2	6

ECE221 - Advanced Fieldwork Experience

Overview

Course Description

In this culminating experience, students apply theory gained from all early childhood education courses. Under the supervision of an early childhood professional, students develop further competencies and take increasing responsibility for creating environment and curriculum of an early childhood classroom. Course provides students the opportunity to intentionally plan and implement developmentally and culturally appropriate instructional strategies based on (local) state and national standards. Course requires students to be onsite teaching for 12 hours per week for 13 weeks.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

1

Other Hours

Other Total Hours:

150

Requirements

Prerequisites

ECE110 Fund of Early Child Educ, ECE120 Child Growth & Development., ECE130 Integ Arts/Play in Early Child, ECE140 Observation & Recording Tech, ECE210 Integ Curr in Early Child, ECE215 Language and Literacy

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate the ways that child development and the learning process occur within multiple contexts including early learning settings.	1	1	1
Collaborate as partners with families in young children's development and learning through respectful, reciprocal relationships and engagement.	2	2	2
Use teaching skills that are responsive to the learning of young children, incorporating play as a core teaching practice, and supporting development in young children.	4	4	1
Understand content knowledge and resources- the central concepts, methods, tools of inquiry and resources for the academic disciplines in an early childhood education curriculum.	5	5	6

ECE225 - Early Childhood Professional

Overview

Course Description

Students study and reeflect upon the ethical and professional responsibilities of the early childhood profession. Family involvement, communication and parent conferences will be focused upon. Students learn Department of Public Welfare regulations and NAEYC-National Association for the Education of Young Children accreditation process. Issues involved in planning, developing, marketing, budgeting, and operating a child care facility will be introduced. Professional portfolio development encourages students' preparation for future interviewing, self-assessment, and continuing professional growth.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain ethical and professional behaviors, including those related to children, families, colleagues, and community, based on NAEYC's Code of Ethical Conduct. (NAEYC Standard 6)	6	4	6
Communicate effectively about advocacy, including educating adults about best practices, through the design of a workshop hand-out and construction of a documentation panel that utilizes written and visual communication. (NAEYC Standard 6)	6	5	6
Articulate a reflective, personal philosophy of early childhood education and classroom management that includes the student's values and an awareness of trends and issues. (NAEYC Standard 6)	6	2	1
Demonstrate the ability to collaborate with colleagues in the planning and presentation of an early childhood education workshop for the community. (NAEYC Standard 6)	6	2	2
Practice strategies for family-teacher conferences and discuss strategies to foster collaborative home-school relationships and communication. (NAEYC Standard 2)	2	4	2
Develop a center-family information file to identify resources for families about parental concerns and challenging behaviors, to document knowledge of local and national professional organizations, and to collect information for colleagues about center issues. (NAEYC Standard 2)	2	4	2
Explain appropriate state regulations as they relate to early childhood programming, reporting child abuse and neglect, and family communication. (NAEYC Standard 6)	6	6	9
Prepare a credential portfolio, including a resume, to document written expressive skills, participation in professional organizations, and a commitment to professional development. (NAEYC Standard 6)	6	5	6

ECE230 - The Director with Vision

Overview

Course Description

Students will explore their educational philosophy through current research and standards. Strategies will be intro- duced to assist the directors' role in helping staff create a vision of best practices for curriculum development and quality environments. Directors and future directors will explore effective communication techniques for working with the children, families, and community.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Identify how to structure groups of children and assign the staff to support their needs. (NAEYC Standard 1)
2. Design and evaluate environments that respond to staff, children, and families' needs using continuous improvement plans. (NAEYC Standard 5)
3. Modify planning strategies that allow staff to use play as basis for curriculum. (NAEYC Standard 4)

4. Demonstrate the use of different schedules and curriculum planning models, including observations and assessments. (NAEYC Standard 3)
5. Design and evaluate all types of communication with staff, children, families, and community. (NAEYC Standards 2, 5)
6. Develop resources to provide communication in a child's home culture. (NAEYC Standard 2)
7. Identify strategies to involve and support families in the center's program. (NAEYC Standard 2)
8. Develop resources to provide families information on available community support agencies. (NAEYC Standard 2)
9. Design and implement strategies for staff to develop skills in team building and reflective analysis of their teaching skills. (NAEYC Standard 4)
10. Demonstrate the ability to implement the Core Body of Knowledge, DPW, and Standards with Staff. (NAEYC Standards 4, 5)

ECE235 - Program Organization & Mgmt

Overview

Course Description
Students will study the administrative role of the director. Strategies will be explored for planning fiscal operations, program management, and day-to-day administration of early care and education programs.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
1. Explain state licensure regulations, national standards, and the accreditation process. (NAEYC Standard 5)
2. Demonstrate the ability to design a budget, set salaries and tuitions, equip classrooms, and understand funding sources. (NAEYC Standard 5)
3. Activate the steps in planning facility space and establishing an early childhood program. (NAEYC Standard 5)
4. Develop policies and procedures for enrolling children and for communicating with families. (NAEYC Standard 2)
5. Demonstrate knowledge about hiring and retaining staff and about writing job descriptions, staff policies, and performance reviews. (NAEYC Standard 5)
6. Articulate pertinent health, safety, and nutrition issues, practices, and recordkeeping. (NAEYC Standards 1, 5)

7. Demonstrate knowledge of networking and community outreach in referrals, consultants, advocacy groups, and advisory boards. (NAEYC Standard 2)

8. Develop a teacher's resource file card box which summarizes pertinent children's books, Internet sites, reference books, curriculum books, journal articles, songs, and fingerplays. (NAEYC Standard 4)

ECI240 - Teach Infants w/Spec Needs

Overview

Course Description

This course will emphasize a comprehensive and practical approach to serving infants, toddlers, and their families in an inclusive developmentally appropriate environment. Studies will be organized around a transdisciplinary approach to early intervention services emphasizing that the physical and social environments of all children should be structured to support and enhance development. Students will be required to have field experiences with infants, toddlers, and their families at inclusive and/or agency-based facilities.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

ECO201 - Principles of Macroeconomics

Overview

Course Description

Deals with macroeconomics which is a study of the economy as a whole. Basic concepts of supply and demand models are developed. Production and income determination and the role of government policies, both fiscal and monetary, are examined. Topics such as inflation; unemployment; business cycles; budget deficits; money and banking; and international finance will be included. A knowledge of elementary algebra is helpful.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the concepts of scarcity and opportunity cost.		#1 Think critically #3 Apply quantitative reasoning
Demonstrate how supply and demand drive a market economic system.	BUAA #6, BMG #8	#1 Think critically #3 Apply quantitative reasoning
Define national output, unemployment, and inflation and demonstrate how they are measured.		#1 Think critically #3 Apply quantitative reasoning
Analyze the Keynesian (Expenditure) model and how fiscal policy can be used to influence the economy.		#1 Think critically #3 Apply quantitative reasoning
Analyze how the Federal Reserve Bank operates and uses interest rates to influence the economy.		#1 Think critically

ECO202 - Principles of Microeconomics

Overview

Course Description

Deals with microeconomics which is a study of the decision making process of individual economic agents, both consumers and producers. Basic concepts of supply and demand models are developed. Various market conditions for both inputs and outputs and their impact on prices, costs, and production are examined. Topics such as government regulation, antitrust legislation, and international trade will be included. A knowledge of elementary algebra is helpful.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the concepts of scarcity and opportunity cost.		#1 Think critically #3 Apply quantitative reasoning
Demonstrate how supply and demand drive a market economic system.	BUAA #6, BMG #8	#1 Think critically #3 Apply quantitative reasoning
Analyze how perfectly competitive firms make input and output decisions in order to maximize profit in both the short run and the long run.		#1 Think critically #3 Apply quantitative reasoning
Analyze how imperfectly competitive firms (monopoly, oligopoly, monopolistic competition) make output decisions to maximize profit in both the short run and the long run.		#1 Think critically

ECO237 - International Relations

Overview

Course Description

This course will provide students with an overview of the field of international relations. Beginning with a historical survey of international relations, the course will then analyze issues related to security, the world economy and social issues. The implications of recent developments such as the end of the Cold War, European Integration, crises in the Middle East, and other major international issues will be analyzed.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

EDU101 - Foundations of Education

Overview

Course Description

Acquaints prospective teachers with the opportunities, preparation and professional responsibilities of the teaching profession. Designed to familiarize members of the general public with the modern American education system as it pertains to their roles as parents, consumers and taxpayers. It includes the historic background of the modern school system; the role of the school in community and society; the organization, administration, and support of the American school systems; varying philosophies of education; and current governmental standards.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the history, present status, and prospects of American education, both public and private.	1	1
Demonstrate through reflective processes an ability to perceive and analyze current problems in American education, including concepts involving educational philosophy and psychology.	5	7
Evaluate the various factors that contribute to the student's decision to become a teacher.	5	6
Describe the current governmental regulations and standards in conjunction with their effect the process of becoming a certified professional.	1	8

EDU105 - Intro to Special Education

Overview

Course Description
Presents a foundation of knowledge about the nature and needs of children with special needs and their families, and the community. Introduces the student to federal and state law, including the Individuals with Disabilities Education Act (IDEA), and Pennsylvania Commonwealth laws and regulations. The student will receive an overview of classifications of disabilities, cultural diversities, service options, and procedural safeguards. In addition, current issues, research, identification and assessment practices, support services and strategies for educating students with disabilities also are reviewed.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
EDU114 Careers in Education

Advisement Comments
Requirements: 10 hours of field experiences and observation. Observe rural/urban classrooms. Work on a special event i.e. autism walk.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARD	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the historical, legal, and philosophical influences which have shaped the field of special education.	6		
Define individual exceptionalities and appropriate subgroups using current educational standards and Commonwealth law.	5		
Describe the relationship and impact of genetics, heredity, pre and postnatal development, and the environment as it relates to students and families with disabilities and cultural diversities	1, 4		
Describe a variety of specific disabilities, including definitions, historical perspectives, etiology, and characteristics.	1		
Identify current research and best practices in techniques and approaches in identifying and assessing students with disabilities.	3, 4		
Identify instructional strategies, methods and curriculums to educate and support students with disabilities and cultural diversities.	2, 4, 5		
Identify best practices for facilitating the successful inclusion of students with diverse learning needs in the regular classroom; that include classroom accommodations, assistive technology, universal curriculum design and access, and related services.	4		
Define the planning and delivery of services of the IFSP (Individual Family Service Plan), and the IEP (Individual Education Plan) for students with disabilities.	2, 4, 6		
Define and describe the roles of the various professionals and paraprofessionals who educate and support students with exceptionalities, in addition to best practices for the supervision of paraprofessionals.	6		
Describe the best practices for collaboration for empowerment with families, professionals and students with exceptionalities.			

EDU114 - Careers in Education

Overview

Course Description

Course will introduce education majors with the career opportunities and employment options in the educational field. Designed to familiarize students with the modern American education system as it pertains to their roles as teachers, coaches, paraprofessionals, aids, or specialists. The course will include role descriptions for specialized job titles in a school; the working relationship of specialized education professionals; and the Pennsylvania requirements to hold specialized educational positions.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Requirements

Advisement Comments

EDU 114 is required as a co-requisite for ECE 110 and ECE 120/125.
Course is a pre-requisite for EDU 105

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the structure and organization of early education and the modern school for children ages birth through 21	1	1
Compare and contrast the educational requirements and responsibilities of early, elementary, middle and secondary educators	4	4
Identify and describe the roles of support staff and administration who contribute to a student's educational experience and the operation of an educational institution	1	1
Discuss current Pennsylvania regulations and standards as they apply to prospective educators, teaching levels, and certified professionals	1	1

EDU115 - Education Field Experience I

Overview

Course Description

Initial field observation and teaching experiences in school classrooms that precede student teaching requires a minimum of 16 hours of observation and participation in a variety of settings. Students gain a closer look at the teacher education system and the relationship of learning theory and effective teaching strategies. Documentation of the field experience will be the completed field experience portfolio.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Other Hours

Other Total Hours:

40

Requirements

Prerequisites

EDU114 Careers in Education

Advisement Comments

Clearances required for classroom observation.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Students demonstrate an understanding of the relationship between theories of teaching and learning and actual teaching practice.		
Students demonstrate an understanding of the professional teaching practices within a school, community, and societal structure.		
Students demonstrate ethical professional behaviors and knowledge of regulations.		
Students communicate knowledge of the profession through cognitive, receptive, and expressive skills.		

EDU120 - Teaching with Technology

Overview

Course Description

Provides prospecitve teachers with an understanding of how to incorporate educational technologies in the contemporary classroom. With an in-depth look at new and emerging technologies, students will discover ways to integrate technology with teaching and learning. Intended for students seeking to improve their technology experience in the classroom.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGE-WIDE STUDENT COMPETENCY
1. Identify educational technologies and their role in teaching and learning. (NAEYC 4; CEC 5; NCATE 7, 8)*	Think critically Use current technology effectively
2. Compare and contrast core technologies used for teaching and learning. (NAEYC 4; CEC 5; NCATE 7, 8)*	Think critically Use current technology effectively
3. Discuss the impact of technology and how it impacts curriculum. (NAEYC 5; CEC 3; NCATE 7, 8)*	Communicate effectively Use current technology effectively
4. Design activities to implement technology in the curriculum. (NAEYC 5; CEC 2, 5; NCATE 8)*	Think critically Use current technology effectively
5. Identify and discuss how technologies will affect schools in the future. (NAEYC 5; CEC 5; NCATE 7)*	Communicate effectively Use current technology effectively

EDU125 - Assess & Instruct/Div Learners

Overview

Course Description

Course emphasis will be on assessment and documentation of knowledge and learning styles as it reflects student achievement. The course examines the links between cognitive learning styles and physical, social, and emotional growth in diverse learners. Five hours of observation required.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

EDU114 Careers in Education

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Compare and contrast formal and informal assessment instruments including portfolios and formative, summative, diagnostic, and benchmark assessment to assess development and learning styles in diverse learners. Standard: CEC 5; CAEP 11; NAEYC 2	1	5
Summarizes problem solving, critical thinking, and cognitive learning styles of students throughout stages of development. Standard: CEC 4; CAEP 11; NAEYC 2	3	2
Explains the significance of the role of the teacher and para-educator in fostering motor development, and social and emotional development (including self-regulation, self-concept, self-awareness, resilience and the ability to deal with stress) and how they tie into cognitive development. Standard: CEC 5; CAEP 1; NAEYC 1	2	1,3
Differentiates between valid and reliable assessment instruments for gathering evidence of student learning and monitoring student progress. Standard: CEC 4; CAEP 11; NAEYC 2	1	9
Evaluates data collected from a virtual assessments of diverse learners, including video clips, case studies, sample assessment instruments. Standard: CEC 4; CAEP 11; NAEYC 2	3	6

EDU201 - Effective Teacher

Overview

Course Description

The Effective Teacher focuses on the use of theory and research to understand and improve classroom teaching. Emphasis is on teacher reflection, decision making, and application of particular techniques. The impact of a teacher's expectations, motivation, classroom management, and instruction is discussed and used a basis for best practice. This course is designed for students who have completed EDU115 or at least 40 hours of classroom observation.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

EDU202 - Fund of Reading Instruction I

Overview

Course Description

An introduction to the teaching of literacy, reading and comprehension for diverse students across all grade levels. The course will focus upon research and strategies to support the current trends and practices in assessment and instruction of literacy, reading and comprehension. The course covers a full range of the reading curriculum, serving as an introduction to instructing students in tutoring, small groups and classroom settings.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, EDU105 Intro to Special Education

Advisement Comments
2 hours of field experience and observation

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	COLLEGE-WIDE COMPETENCY
Evaluate the changing nature of literacy in today's educational systems, including diverse populations with respect to culturally diverse populations and students with unique learning styles.	1, 5	1
Discuss and research current standards, assessment strategies, and legislation related to the instruction of literacy, reading and comprehension. Standard:	1, 4	1
Analyze concrete strategies and techniques for the planning and implementation of reading instruction for students across the curriculum.	1, 4	6
Summarize skills in the use of graphic organizers, universal design for learning and modern technology to enhance student achievement in literacy, reading and comprehension.	1, 4, 5	2
Research and explore strategies that utilize materials beyond the text book to support literacy, reading and comprehension.	1, 4, 5	4
Compare and contrast the role of reading coaching and learning communities to provide learning support in literacy, reading and comprehension to all students.	1, 2, 4, 5	2

EDU210 - Behavior Mgmt & Guide

Overview

Course Description
The course is an overview of behavior problems and disorders that may be encountered in early childhood, middle and secondary, and special education environments. Identification, classification, assessment and multidisciplinary services are examined with focus on management and intervention strategies. Fundamental principles of guidance and constructive discipline will be addressed.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
EDU105 Intro to Special Education

Advisement Comments
10 hours of field experience and classroom observation.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARD	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify typical and atypical patterns of human development and familial, cultural, and biological influences as they affect child behavior. Standard: CEC 2; CAEP 1, 4; NAEYC 1	1	1	7
Demonstrate an understanding of children with behavior disorders and knowledge of the identification, classification, prevalence, and characteristics of such disorders. Standard: CEC 2, 8; CAEP 1, 2, 3, 4; NAEYC 1, 3	1,3	3	1
Analyze and evaluate historical and current trends in diagnosis, treatment, assessment practices, and intervention strategies for children with behavior disorders. Standard: CEC 1, 2, 3, 10; CAEP 1, 2, 4; NAEYC 1, 3	1,3	2	7
Analyze the differences between students that struggle to make positive / prosocial behavior choices and students who have a documented behavior related disability. Standard: CEC 2, 3, 5; CAEP 1, 2, 3, 4; NAEYC 4	4	1	7
Identify and prescribe best collaborative practices as part of an IEP or an IFSP team to build individual and classroom centered positive behavior support plans. Standard: CEC 4, 5, 6, 8; CAEP 1, 2, 3, 4; NAEYC 4	4	3	4
Identify and prescribe research-based interventions that can be used to assist IEP teams with the pre-referral / classification process for the identification of a behavior related disability / classification. Standard: CEC 9, 10; CAEP 1, 2, 4; NAEYC 2, 6	2,6	2	4
Identify and evaluate current restorative, trauma-informed, and proactive best practices engineered to build individual, classroom level and school wide capacity aimed to support and assist students with a wide range of behavior or mental health related disabilities in the school or center-based setting across all educational settings. Standard: CEC 9, 10; CAEP 1, 3, 4; NAEYC 6	6	1	6

EDU240 - Tech Integration in Education

Overview

Course Description
This course will present best practice for integrating technologies and enhancing instruction in an educational setting. Students will analyze current technologies for their effectiveness and use with diverse learners. Online collaboration and web literacy tools will be evaluated for their effectiveness in building learning communities. This course is designed for individuals with intermediate computer skills.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Students will compare and contrast the effectiveness of different technologies when addressing the needs of diverse learners. (NAEYC 4; CEC 1; NCATE 2, 7)*	Think critically Use current technology effectively
2. Students will identify appropriate technologies for student assessment. (NAEYC 3; CEC 4; NCATE 6)*	Think critically Use current technology effectively
3. Students will utilize online collaboration and web literacy tools for their use in building learning communities. NAEYC 4; CEC 2; NCATE 8)*	Think critically Use current technology effectively
4. Students will design activities implementing technology in the curriculum. (NAEYC 5; CEC 3, 5; NCATE 7, 8)*	Think critically Use current technology effectively
5. Students will discuss new technologies and their potential for effective use in the classroom. NAEYC 4; CEC 5; NCATE 8)*	Think critically Communicate effectively Use current technology effectively

EDU291 - School Comm with Families

Overview

Course Description

Course allows students to develop an understanding of the importance and complex characteristics of families and communication. Course will enable students to creat respectful, reciprocal relationships with families that support and empower families and involve all families in their children's development and learning. Course will present foundation and skill in the area of comprehending family dynamics, family structure and communications with-in diverse families. The course will focus upon dynamics that lead to conflicts between schools and families and how to implement effective means to resolve these conflicts via understanding communication patterns, cultural values and appropriate communication. The course is designed for individuals that work with families in a variety of situations, including early learning centers, schools, social services institutions and criminal justice environments.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe dynamics of conflicts between schools and families.	3	4
Describe dynamics of conflicts between students.	1	7
Define dynamics between staff and students.	1	4
Describe where conflicts occur with-in the school community.	3	7
Describe conditions that escalate conflicts between school and families, students and staff and staff and students.	3	7
Identify how emotions and communications effect conflicts.	2	2
Demonstrate the ability to develop communication skills to resolve conflicts.	2	2
Demonstrate the ability to develop activities to teach conflict resolution skills.	3	9
Demonstrate the ability to effectively communicate with students and families both verbally and non-verbally.	3	2
Demonstrate an awareness of cultural issue, personal issues and emotional issues that may lead to conflicts	2	9

EGR101 - Engineering Graphics

Overview

Course Description

Introduces the language of industry. Develops basic drafting techniques and an understanding of industrial type drawings. Topics covered include orthographic and pictorial drawing, dimensioning, fasteners, machine components, pattern development, and drafting standards. Additional areas of study include various layouts, graphs, displacement diagrams, descriptive geometry, etc. as they relate to the above topics.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Read and interpret simple engineering drawings and prints.
2. Use typical drafting tools, materials, and equipment.
3. Display an acceptable drafting technique.
4. Organize and make a simple engineering detail drawing which would include the appropriate views, dimensions, and information.
5. Organize and make a simple assembly drawing including the bill of material.

6. Recognize and understand some of the common standards and symbols used on engineering drawings.

7. Recognize common standard size threads and fasteners.

8. Apply standard tolerances and fits to drawing projects.

9. Produce drawings using Autocad software package.

EGR101L - Engineering Graphics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

EGR102 - Engineering Orientation

Overview

Course Description
Explains the nature and role of the engineer in an industrial society and the functions and requirements of the various branches of the profession. Considers four and five-year engineering curriculums and transfer issues.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Learning Objectives

Learning Objectives
1. Recognizing characteristics of a person who can develop into the successful engineer, engineering-technologist, and technician.

2. Understanding the educational requirements of the engineer.

3. Distinguishing between the nature of the work involved in the various branches and sub-branches of engineering.
4. Defining the various functions an engineer may have in his career.

5. Assessing the responsibilities of the engineer.

EGR213 - Statics

Overview

Course Description
A calculus-based introduction to the mechanics of bodies in equilibrium for engineering students. Topics include: position and force vectors, equilibrium of a particle, moments, equilibrium of a rigid body, analysis of trusses and frames, friction, cent of gravity and centroid, moments of inertia, and principle of virtual work.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT196 Calc & Analytic Geometry II, PHY210 General Physics I

Learning Objectives

Learning Objectives

1. To help the student learn the course material outlined in the course content by achieving the stated behavioral objectives.
2. To develop the student's capacity to solve the kind of problems associated with a first course in mechanics.
3. To prepare the student in part to continue his/her educational studies in engineering or engineering technology at a four-year college.

EGR214 - Dynamics

Overview

Course Description
A calculus-based study of kinematics and dynamics of bodies for engineering students. Topics include: kinematics of a particle: rectilinear and curvilinear motion; dynamics of a particle: Newton's second law, work and energy, impulse and momentum, collisions; planar kinematics and dynamics of a rigid body.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT201 Calc & Analytic Geometry III, EGR213 Statics

Learning Objectives

Learning Objectives

1. To help the student learn the course material outlined in the course content by achieving the stated behavioral objectives.
2. To develop the student's capacity to solve the kind of problems associated with a second course in mechanics.
3. To prepare the student in part to continue his/her educational studies in engineering or engineering technology at a four-year college.

EGR297A - Principles of Engineer Design

Overview

Course Description
This course serves as an introduction to the principles of engineering design as a foundation for subsequent engineering design courses. Emphasis is placed on the engineering design process focusing on problem definition, specifications, generation of ideas, design, analysis and prototype development and communication. Laboratory work focus is on prototype development using modeling software, relevant material design and creation, and the refinement and redesign of a product. Various analytical methods and instrumentation required for the development of a specific prototype will be introduced.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
1

Lab Hours

Lab Hours (per week):
3

Requirements

Prerequisites
EGR102 Engineering Orientation

Learning Objectives

Learning Objectives

1. Demonstrate knowledge of the engineering design process
2. Identify and research a specific engineering problem for stakeholders at LCCC
3. Design a prototype using various 3D modeling software relevant to the materials required
4. Construct and build a working prototype associated with a specific engineering problem
5. Demonstrate and use basic laboratory techniques and procedures for the analysis and evaluation of a prototype
6. Use data to redesign and refine a prototype as part of the engineering design process.
7. Demonstrate proficiency in technical writing, reporting and presentation of results.
8. Identify components of the US patent search and application process

ELE120 - D.C. Circuits

Overview

Course Description

This is a study of the basic principles of voltage, current, and resistance. Solid state devices and their graphical characteristics are studied. Among the topics covered are resistance, color code, Ohm's Law, series and parallel circuits, voltage dividers, semiconductor diodes and transistors. Network analysis is introduced using DC sources and resistive components. In the laboratory, the students will connect components into basic electrical circuit configurations and use DC multimeters to verify circuit operation.

Total Credits

Total Credit Hours:

4

Billing Hours ⓘ

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Lab Hours

Lab Hours (per week):

0

ELE120L - D.C. Circuits Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours ⓘ

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):

3

ELE130 - Digital Fundamentals

Overview

Course Description

Digital Fundamentals is the study of the basic circuits common to digital devices such as logic gates, flip flops, counters and arithmetic circuits. The examination of various number systems and their applications are also covered in this course.

Total Credits

Total Credit Hours:

4

Billing Hours ⓘ

Billing Hours Min:

0

Lecture Hours
Lecture Hours (per week):
0

Lab Hours
Lab Hours (per week):
0

ELE130L - Digital Fundamentals Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
3

ELE165 - A.C. Circuits

Overview
Course Description
This course is the study of varying voltages and currents in simple circuit arrangements of inductors, capacitors, and resistors. Studies include oscilloscope usage, capacitors, inductors, series and parallel RLC circuits, resonance, time constants. Vector algebra is introduced to analyze more complex circuits. In the laboratory the students connect components into basic electrical circuits and use AC meters and the oscilloscope to verify circuit operation.

Total Credits
Total Credit Hours:
4

Billing Hours
Billing Hours Min:
4

Lecture Hours
Lecture Hours (per week):
3

Lab Hours
Lab Hours (per week):
0

ELE165L - A.C. Circuits Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

ELE175 - Intro to Microprocessors

Overview

Course Description
The course introduces students to microprocessors and microcomputers. Examined is microprocessor system organization and its instruction set. Also presented are input and output techniques and their microcomputer applications in real situations.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

ELE175L - Intro to Microprocessors Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

ELE210 - Electronic Circuits

Overview

Course Description
Students are introduced to standard electronic circuitry. Studies are the theory and application of diodes, junction transistors and FET transistors; circuit arrangements for coupling; and A.F. and R.F. voltage generation. Software simulation programs are used to verify circuit operations.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
0

ELE210L - Electronic Circuits Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

ELE215 - Industrial Electronics

Overview

Course Description
A study of sensing, control and actuator devices and how they are used in an industrial environment. Topics included in the course are temperature, level and flow measurements, semiconductor control devices, industrial process actuators; digital control circuit applications; open and closed-loop feedback systems.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
1.5

Lab Hours

Lab Hours (per week):
0

ELE215L - Industrial Electronics Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1.5

ELE235 - Programmable Controllers

Overview
Course Description
Intended to teach the student to use a programmable logic controller. The student will develop ladder diagram solutions for specific applications and produce a corresponding programmable controller program. A programmable controller will be used to verify the solution.

Total Credits
Total Credit Hours:
2

Billing Hours
Billing Hours Min:
2

Lecture Hours
Lecture Hours (per week):
1.5

Lab Hours
Lab Hours (per week):
0

ELE235L - Programmable Controllers Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1.5

ELE255 - Telecommunications

Overview

Course Description
This course is the study of the methods used to transmit and receive information electronically, over a distance. Various analog and digital modulation and coding schemes, utilizing a variety of transmission methods, will be examined and analyzed. Information capacity, bandwidth, error rate, transmission reliability, advantages, and disadvantages will be studied for each of the telecommunication schemes. Topics covered include telecommunications methods currently in use for audio, video, and data transmission. The course will give the student a broad background in telecommunication circuits.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

ELE275 - Integrated Circuits

Overview

Course Description
This course is a study of linear and digital integrated circuits. The operational amplifier is studied in a variety of applications. The student will be introduced to a wide variety of integrated circuits and will use a number of these circuits in the laboratory.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
0

ELE275L - Integrated Circuits Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

ENG099 - Basic Skills Writing

Overview

Course Description
ENG 099 is designed for students whose writing placement test score indicates that preparatory writing skills would prove beneficial for successful completion of college level courses. An intensive exploration of the writing process, ENG 099 emphasizes multiple reading comprehension strategies alongside composition practices such as prewriting strategies, revising multiple drafts, and editing final drafts. Assignments focus upon reading applications to develop college-level essays with accurate grammar and sentence structure.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Entry Level

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVES: ENG 099	DEPARTMENT OBJECTIVE	COLLEGE-WIDE COMPETENCY
Compose paragraphs of 250 words or more through multiple drafts, in several rhetorical modes, and with sources.		#2
Discover, generate, develop, and evaluate ideas and details using various methods		#1
Develop and use effective strategies for drafting, considering constructive criticism, revising, rewriting, and editing.		#1, #2
Respond to different writing situations and audience needs through intentional shifts, for example, in tone, level of formality, and word choice.		#1, #2,
Apply knowledge of grammar, mechanics, punctuation, and spelling while composing, revising, and editing		#1, #2,

ENG100 - Fundamentals of Writing

Overview

Course Description
ENG 100 is designed for students whose writing placement test score indicates that preparatory writing skills would prove beneficial for successful completion of college level courses. These skills include the abilities to utilize the writing process to generate college essays, to revise independently by to identify weaknesses and strengths, and to compose a logically organized, grammatically accurate 500+ word essay. An intensive exploration of the writing process, ENG 100 emphasizes prewriting, revising multiple drafts, and editing final drafts. The essays written in ENG 100 are evaluated for content and mechanics.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Entry Level

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVES: ENG 100	DIVISION OBJECTIVES	COLLEGE-WIDE COMPETENCY
Compose essays of 500 words or more through multiple drafts, in several rhetorical modes, and with sources.		#2
Discover, generate, develop, and evaluate ideas and details using various methods.		#1
Develop and use effective strategies for drafting, considering constructive criticism, revising, rewriting, and editing.		#1, #2
Respond to different writing situations and audience needs through intentional shifts, for example, in tone, level of formality, and word choice.		#1, #2
Apply knowledge of grammar, mechanics, punctuation, and spelling while composing, revising, and editing		#1, #2
Locate resources in a scholarly database and demonstrate knowledge of basic documentation conventions by citing sources in MLA style.		#6

ENG105 - Research and Composition

Overview

Course Description
In English 105--Research and Composition, students write essays, incorporate and integrate primary and secondary sources into their own writing, and master library skills. Students strive for sound logic, effective use of details, appropriate diction, and correct grammar and mechanics. Students study models of good writing, including student essays and professionally written essays.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Advisement Comments
Requires Writing Placement Intro Level Score or ENG 100 or ESL 251

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Produce college-level writing, including sustained, argumentative essays using reason, logic, details, and properly-attributed evidence to support claims and explain significance	#2 Communicate Effectively #1 Think Critically
2. Implement an effective writing process to discover ideas, refine topics, plan arguments, anticipate and address audience needs, and draft, revise, edit, proofread, and publish writing	#1 Think Critically
3. Find, evaluate, and use information resources, legally and ethically, to answer questions, deepen understanding, and address problems	#6 Information Literacy

ENG106 - Introduction to Literature

Overview

Course Description
Literature is creative, imaginative verbal art. This course introduces literature and literary studies. Through a survey of literature depicting a wide range of human experience, it introduces concepts useful for analyzing and interpreting fiction, poetry, and drama. It considers relevant, credible resources as it examines relationships between literary significance and social position, inequality, cultural contexts, and political power.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Define elements of fiction, poetic devices, and dramatic elements; detect them in literary works; and explain how they work in individual works of literature	Competency 1: Critical Thinking
2. Examine the historical, social, and cultural contexts of various literary works and their readers, and infer how these contexts affect the works and interpretations of them	NA
3. Examine relationships between social position, inequality, and political power as represented in literature	Competency 7: Analyze Human Diversity
4. Outline, develop, and produce original interpretations of individual works of literature	Competency 2: Communicate Effectively
5. Locate relevant, credible, resources; evaluate their information and arguments; and explain their contributions to academic discourse on literary works	Competency 6: Apply Information Literacy Skills

ENG107 - Writing in the Workplace

Overview

Course Description

Presents fundamental concepts of English as used in the workforce. Emphasizes writing technical reports, memoranda, resumes and business letters. Students compose reports pertaining to various aspects of their chosen careers. Oral reporting is included.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Compose clear, concise, professionally written documents with an emphasis on audience and purpose using the English language correctly and effectively, eliminating wordiness, clichés, and trite expressions.	Competency 2: Communicate Effectively
2. Write memos, letters, reports, job application materials, and social media content with proper formats, reliable facts, and relevant details.	Competency 9: Evaluate ethical aspects of decision making.
3. Employ relevant, accurate and effective graphical representations of concepts, processes and data such as tables, graphs, charts or drawings.	N/A
4. Locate relevant, credible resources via online subscription databases and public information sources, incorporate information and ideas from such sources in original writing, and provide appropriate attribution using MLA style or APA style per the student's major.	Competency 6: Apply Information Literacy Skills
5. Utilize relevant technology effectively to develop professional writing skills.	Competency 5: Use current technology effectively

ENG108 - Creative Nonfiction

Overview

Course Description

Focuses on the composition of creative non-fiction in several rhetorical modes (portrait, reportage, review, epistle, memoir, humor, lecture, valediction, etc.) to develop voice and master grammar and mechanics. Students analytical skills and creativity are enhanced through the study of good models of writing by professionals from a variety of fields.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition

Learning Objectives

Learning Objectives

1. The ability to write mechanically correct, organized, unified, and coherent essays.

2. The ability to adapt voice and material to rhetorical modes and audiences.

3. The ability to use concrete examples and quotations to develop essays from a specific, limited thesis.

4. The ability to read professional essays closely, discerningly, and critically.

5. The ability to model writing after professional essays.

ENG111 - Speech

Overview

Course Description
This course is designed to develop students' speechwriting and presentation abilities while increasing self-confidence and interpersonal skills appropriate in academic, work, and community settings. It addresses basic theories of public speaking but emphasizes practice through several types of speaking situations: formal, informal, mediated, and impromptu. Students learn how to prepare an effective presentation employing outlines, research, visual aids, and technology. In addition, students develop critical listening and analysis skills while completing self and peer reviews and critiquing renowned speakers' performances. Students also examine speaking rights, cultural diversity, and ethical responsibilities through written reactions and reflections.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Prerequisites
ENG100 Fundamentals of Writing, ESL251 English for Academic Purposes

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGE WIDE STUDENT COMPETENCY
1. Construct and deliver introductory, informative, persuasive, and demonstrative speeches - standing up in front of an audience and including the written, verbal, and non-verbal elements of effective communication. *Students unable to stand because of physical limitations will be accommodated.	2) Communicate effectively
2. Apply logic, inclusive language, and ethical responsibility to speech contents, and manage anxiety when in the presence of audiences.	7) Analyze human diversity 1) Think critically
3. Identify, prepare, and synthesize research, visual aids, and technology into presentations, including mediated speech environments.	5) Use current technology effectively 6) Apply information literacy skills
4. Identify and evaluate the speaking techniques of self and others to assess logic, delivery, and ethics in speeches and improve performances.	4) Participate cooperatively within a team 9) Evaluate ethical aspects of decision making

ENG154 - Women & Gender Studies

Overview

Course Description

This interdisciplinary and multidisciplinary course asks students to engage in discussion about historical and contemporary issues in Women and Gender studies. Students will explore how gender intersects with class, race, sexuality, age, and ability within social institutions. The course will examine how androcentric power structures contribute to the oppression of women and marginalized populations, and how these power structures can be challenged through non-binary perspectives and scholarly practices. Through completing this course, students will be prepared to apply the critical tools of Women and Gender Studies to their academic, personal, and occupational lives.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition

Corequisites

ENG106 Introduction to Literature

Advisement Comments

Coreq: ENG 106

Learning Objectives

Learning Objectives

1. To investigate and critique scholarly sources in the field of women and gender studies and facilitate discussion on these sources in a flipped classroom.

2. To develop one's understanding of intersectionality and diversity through creating and presenting a PowerPoint, podcast, or documentary film on contributions made by women and marginalized populations.

3. To examine how androcentric power structures contribute to the oppression of women and marginalized populations, while formulating solutions for creating change in the world through planning a business, nonprofit organization, charity, or government policy.

ENG201 - World Literature I

Overview

Course Description

The analysis of significant international literature from its origins through the Renaissance, consolidates thinking, reading, and writing skills. Intensive reading of specific masterpieces enables the student to better appreciate and evaluate major literary and philosophical movements from pre-Christian times to the Renaissance. Lectures and student discussions will examine human thought of the past and its relation to the present.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

1. The ability to read and understand college-level fiction, drama, and poetry of different periods, styles, and cultures;
2. The ability to respond to and discuss the aesthetic qualities in literature;
3. The ability to see the selected works as reflections of different religious, philosophical, and cultural patterns;
4. The ability to follow complex ideas and to see the interrelatedness and ramifications of complex concepts;
5. The ability to recognize, in literature from different cultures, universal human moral and intellectual concerns;
6. The ability to think and write clearly and critically about literature.

ENG202 - World Literature II

Overview

Course Description

Surveys significant works of major international authors from the neoclassical era through the present to enable students to better understand and appreciate major literary works and to enhance students' thinking, reading, and writing skills. Emphasis on the study of dramas and novels of significant writers and the movements such as Neoclassicism, Romanticism, Realism, and Existentialism, in which these works were produced.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

ENG205 - American Literature I

Overview
Course Description
Introduces works of American literature from the pre-colonial period to the Civil War era. Readings will develop insight into American history, culture, politics and literary trends. It examines the influence of philosophical, religious, psychological, and sociological ideas on American writers and society.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives
Learning Objectives
By the end of this course, students should demonstrate the following competencies:

1. The ability to understand and appreciate the contributions of selected writers to the development of American literature.
2. The ability to recognize the impact of ideas, philosophy, sociology, theology, and psychology on American literary trends.
3. The ability to identify and define literary terms and vocabulary relevant to historical movements and literary trends in America.
4. The ability to analyze and evaluate literature critically.
5. The ability to use both primary and secondary critical sources to write analytical essays.
6. The ability to employ logical thinking in the written and oral analyses of works of American writers.

ENG206 - American Literature II

Overview
Course Description
Introduces works of American literature from the post-Civil War era to post-World War II era. It examines the influence of philosophical, religious, psychological, and sociological ideas on American writers and society. Readings will develop insight into American history, culture, politics, and literary trends.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

1. The ability to understand and appreciate the contributions of selected writers to the development of American literature.
2. The ability to recognize the impact of ideas, philosophy, sociology, theology, and psychology on American literary trends.
3. The ability to identify and define literary terms and vocabulary relevant to historical movements and literary trends in America.
4. The ability to analyze and evaluate literature critically.
5. The ability to use both primary and secondary critical sources to write analytical essays.
6. The ability to employ logical thinking in the written and oral analyses of works of American writers.

ENG210 - British Literature I

Overview

Course Description
Analyzes works of significant literary and intellectual movements from Anglo-Saxon times to neoclassicism to cultivate an appreciation of British literature and to develop thinking, reading, and writing skills.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Place literary works in historical, cultural, and literary perspective.	
2. Understand the works of selected British authors in terms of their contributions to the development of British literature and western culture.	
3. See the development of the English language from Anglo-Saxon to modern English.	
4. Evaluate literature critically and write a clear literary analysis.	

ENG211 - British Literature II

Overview

Course Description

Analyzes works of major British writers from the Romantic period to the present, emphasizing works of significant literary and intellectual movements to develop an appreciation of literature, as well as, thinking, reading and writing skills.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

1. Students will learn to place literary works in historical, cultural, and literary perspective.
2. Students will understand the works of selected British authors in terms of their contributions to the development of British literature and Western culture.
3. Students will be able to evaluate literature critically.
4. Students will learn to write clear analyses of literature.

ENG215 - Introduction to Poetry

Overview

Course Description

Analysis and study of individual poems concentrating on short and medium-length poems. Emphasis on understanding and appreciating poetry as a significant experience for the reader rather than on critical theory and background. Poetry of the English language is the central content of the course; however, poetry of other languages in translation is included.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives
At the conclusion of this course, students should demonstrate the following competencies:

1. the ability to identify and understand poetic devices;
2. the ability to differentiate between the kinds of poetry according to form (open form, closed form) and content (narrative, lyric, dramatic, didactic);
3. the ability to read more closely, understanding the relationship between how the poem is made (technique) and what it expresses;
4. the ability to enlarge their "capacity to experience poetry."

ENG216 - Minoritized Charac Shakespeare

Overview

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	COLLEGE-WIDE COMPETENCY
Produce original academic writing that analyzes and evaluates works of William Shakespeare in relation to ongoing, published discussions of such works and relevant ideas, literary theories and interpretive frameworks, and critical trends.	#1
Examine historical, social, and cultural contexts of Shakespeare's sonnets and plays. Recognize how race, gender, and religion are explored in these works.	#7
Locate relevant, credible resources and apply information responsibly.	#6
Discuss and research ethical and intellectual concerns in Elizabethan & Jacobean England, Colonial America, and the present.	#9

ENG220 - Introduction to Drama

Overview

Course Description

A study of literature for students more interested in the special genre of drama than in a historical survey of all literary forms. Introduces dramatic literature from its origins to the present.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

1. The student will read and be able to discuss plays of different periods and styles.

2. The student should become a critical reader and viewer of drama which is filmed or performed live.

3. The student will study the history and development of drama according to period, playwrights, and styles.

ENG225 - Journalism

Overview

Course Description

The course is designed to prepare students for the ever-changing roles journalists now fill. Most reporters are asked to write, take photos, shoot video, and post items to the Internet on a daily basis. With a focus on good journalistic reporting and storytelling, students will learn how to prepare news, feature, profile and editorial stories for a variety of multimedia formats, including: print and online editions of LCCC's student newspaper "The Paw Print", online blogs, photojournalism, videos, and audio sound bites.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
ENG105 Research and Composition

Advisement Comments
Listed as CMN 225 / ENG 225 / IDS 225

Learning Objectives
Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Clarify ethical decision-making and responsibility and employ ethical practices associated with journalism.	Think critically. Evaluate ethical aspects of decision-making.
2. Master the conceptualization, production and publication of multimedia journalism through producing stories for print and online publication.	Communicate effectively. Use current technology effectively. Apply information literacy skills.
3. Analyze, critique and provide feedback while working in a collaborative environment.	Participate cooperatively within a team.
4. Evaluate modern journalism for message effectiveness and appropriate audience.	Analyze human diversity. Apply information literacy skills.

ENG227 - Literature and Film

Overview
Course Description
Through narratology, an interdisciplinary study of the structures of stories and of the relationships between stories and human beings, this course introduces students to the complex relationships between two related but unique storytelling forms: literature and film. The course emphasizes study of the theoretical nature of literature and film; of relationships between literature and film; of debates about which form more satisfyingly presents or reflects human experiences and human conditions; and of the creative processes people use to produce literature and film. Students will acquire and employ the technical vocabulary necessary for discussing and writing critically about literature and film.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

1. To understand both literature and film as dynamic, interpretive media.
2. To understand theoretical principles of form and narrative and, specifically, the key concepts of narratology as applied to literature and film.
3. To understand and employ correctly a working vocabulary of key terms used in publishing and filmmaking industries and by literature and film scholars.
4. To develop sophisticated readings of written and visual images through close analysis of form and narrative in literature and film.
5. To recognize significant themes in literature and film, and to study the major historical, theoretical, and cultural debates that shaped interdisciplinary studies of literature and film.
6. To conduct and present independent research on literature and film.

ENG230 - Contemporary Fiction

Overview

Course Description
Introduces students to readings published since the end of World War II, with an emphasis on short stories, novels, and plays written by prominent American and international authors during the 1970's, 80's, and 90's. In particular, the course explores the relationship between art and parallel social, cultural, religious and political events shaping contemporary life. In readings, discussions, and lectures students will discover writers who experiment with literary forms to challenge depictions of the human condition.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

1. To be skilled in the close reading and analysis of contemporary short stories, novels, and plays that belong to the following categories:
    A. War Narratives
    B. New Journalism
    C. Metafiction
    D. Magical Realism

E. Dystopia

F. Postmodern Fairy Tales

G. Experimenters

H. Diversity

2. To identify major themes and literary conventions when analyzing contemporary texts.
3. To identify the major figures and works influencing the writing of contemporary fiction.
4. To understand and employ literary theory and criticism when analyzing contemporary fiction.
5. To develop essays that have the following characteristics:

A. Limited, precise thesis

B. Clear organizational structure

C. Sound paragraph division and focus

D. Detailed, concrete examples (appropriately introduced and documented)

E. Correct grammatical usage

ENG232 - Women's Literature

Overview

Course Description
Focuses on the rich and varied tradition of writing by women. Explores the traditional genres as well as non-traditional genres (journals, memoirs, letters, speeches) in which women have written over the centuries. Readings emphasize the historical roots from which women's writing grew and explore the thematic range of women's literary heritage.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives
1. The ability to recognize and trace the tradition of women's writing in the English language from the Middle Ages to today.

2. The ability to learn how and why women wrote journals, memoirs, and letters and explore the reasons that women's literature was often devalued in years past.

3. The ability to learn what prompted feminist polemicists such as Elizabeth Cady Stanton, Sojourner Truth, and Margaret Fuller to speak out against the injustices of their day.

4. The ability to recognize themes which run through women's literature.

5. The ability to become more thoughtful and discerning readers as they learn to read closely and interpretively, applying feminist critical approaches.

6. Learn to conduct and present independent research.

7. Learn or review basic literacy terminology so they can write intelligently about the literature they are reading.

8. Learn to make connections between the themes of literature and the gender issues which affect their lives.

ENG235 - Creative Writing

Overview

Course Description
An opportunity for students to express their ideas in various creative modes. To stimulate creativity in thinking and writing, the course allows for close student-instructor examination and evaluation of student creations.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives
- Write more confidently, creatively, and effectively.
- Produce short creative works, such as the essay, short fiction, short drama, and poetry.
- Understand the technical elements of creative fiction, non-fiction, drama, and poetry.
- Know where to find information about writing markets and manuscript requirements.

ENG237 - Science Fiction

Overview

Course Description
Focuses on science fiction and imaginative literature. Significant eras in the history of the genre will be studied using representative key novels and short stories. Assigned readings will be supplemented with films, music, and other relevant media.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Students will become acquainted with major science fiction writers.	
2. Students will recognize distinguishing features and elements of science fiction.	
3. Students will learn to evaluate works of science fiction with an awareness of larger cultural concerns and ideologies.	
4. Students will improve critical reading and writing skills, specifically in regard to literary analysis and interpretation.	
5. Students will develop an appreciation for the genre.	

ENG238 - Gothic and Horror Literature

Overview

Course Description
From Medieval cathedrals to on-line vampire chat groups, the Gothic has provided a major theme in literature and Western culture. Examines manifestation of the Gothic since the Middle Ages and concentrates on the emergence of the literature of the supernatural as exemplified by such writers as Mary Shelley, Bram Stoker, H. P. Lovecraft, and Anne Rice. Subjects studied will include Medieval folk ballads, the Frankenstein myth, vampirism, and other topics relevant to the Gothic literary tradition. Touches on related subjects such as Gothic architecture. Pre-Raphaelite painting, eschatalogy, and Goth rock.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives
Course overview: the Gothic tradition

Cultural myth, archetype, and narrative form

2. Origins of the Gothic

The Dark Ages

Scholasticism and the Medieval world-view: a white garment of churches

Romanesque and Gothic architecture: a shaped cosmos

3. Medieval folk ballads and the cultural transmission of archetypes
4. The Emergence of Gothic literature (18th century)

   Horace Walpole, Matthew Gregory Lewis, Ann Radcliffe
5. The Romantic circle: literary themes and visions

   Mary Shelley's *Frankenstein* and the modern Prometheus

6. Gothic literature in the 19th century

   Edgar Allan Poe

   Victorian poetry: Lord Tennyson, Robert Browning, Charles Algernon Swinburne

   The Pre-Raphaelites: Dante G. Rossetti, John Everett Millais, William Holman Hunt
7. Gothic at the *Fin de Siecle*

   A literature of decadence: Charles Baudelaire, Joris-Karl Huysmans, Oscar Wilde's *Picture of Dorian Grey*

   Bram Stoker's *Dracula* and vampire folklore

   F. W. Murnau's *Nosferatu*: the first modern horror film masterpiece

   Fin de Siecle painting: Edvard Munch, Gustav Klimt, Aubrey Beardsley, Maxfield Parrish
8. Horror in the early 20th century: an overview

   Theosophy, Aleister Crowley, Eliphas Levi, and the occult

   World War I: *Union des Gueules Cassees*
9. Emergence of the Horror Film

   Universal Studios: James Whale, Tod Browning, Boris Karloff, Bela Lugosi *Dracula*, *Frankenstein*, *The Mummy, Murders in the Rue Morgue*, *King Kong*
10. The modern horror novel

    H.P. Lovecraft and the American Gothic tradition
11. Horror at Mid-Century: Communists, Fluoridation, and Nuclear Paranoia

    Anthony Burgess' *A Clockwork Orange*
12. Contemporary Horror Literature

    Anne Rice's *Interview With the Vampire*

    Andrei Codrescu's *The Blood Countess*

    Stephen King, Olive Barker, Skipp and Spector
13. Contemporary Trends in the Gothic

    Goth-rock

    New Age and neo-pagan spiritualism

ENG241 - Literary Magazine Practicum

Overview

Course Description

Students will focus on the history, context and significance of the literary magazine in American culture, as well as manage the production of the college's literary magazine. Concurrent with a study of literary magazine volumes past and present, students will promote the college's magazine, solicit student submissions, oversee editorial review, guide the selection of works for publication, edit manuscripts, layout and design the magazine, work with other student groups and college staff to release and publicize the issue, and plan the event of its reading. The students will serve as managing editors of the magazine and be responsible for its publication under the guidance of the instructor.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
1.5

Other Hours

Other Total Hours:
8

Requirements

Advisement Comments
This is a restricted registration course. The course will be limited to three to six students. Student registration will be by permission of the instructor. Similar to an independent study, students will meet with the instructor once each week for approximately one-and-a-half class hours. Additional work will be completed outside of the one-and-a half class hours (up to 75 hours plus for the semester).

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
Recognize literary context and publication standards.	1. Think critically
Differentiate the types and styles of literary magazines.	
Implement ethical publication standards and correspondence.	9. Evaluate ethical aspects of decision-making
Establish partnerships with other student groups, faculty, and staff.	2. Communicate effectively
Produce an industry-standard literary magazine.	5. Use current technology effectively.

ENG242 - Latin American Literature

Overview

Course Description
This course is a survey of Latin American literature from its inception to present. All work will be read in English translation. Students will engage with poetry, prose, and plays through readings, discussions, and writing activities to improve their understanding of Latin American Literature and related literary trends and concepts such as Colonialism, Romanticism, Modernism, Magic Realism, and the Latin American Boom, as well as the works' relationships to politics, history, culture, and identity.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Recognize and describe Latin American literature as a genre along with its cultural influences and contributions.		#7
Identify relevant historical, political, and cultural movements and literary terms and trends.		
Discuss ethical and intellectual concerns in Latin American literature and research.		#9
Use scholarly resources and apply information responsibly.		#6
Think and write clearly and critically about Latin American literature.		#1

ESL091 - Basic Structure of Written Eng

Overview

Course Description

ESL 091 builds the student's basic knowledge of grammar and sentence structure. This course focuses on the use of correct verb tenses, modal auxiliaries, nouns and pronouns. Students learn the basics of sentence writing and the development of well-constructed paragraphs.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Use all verb tenses correctly and appropriately.
2. Use modal auxiliaries in present/past tenses to express ability, obligation and necessity, suggestion/advisability, degrees of certainty, requests, preference, repetition of past actions.
3. Distinguish between count and non count nouns.
4. Form the plural of regular and irregular nouns.
5. Use expressions of quantity with count and non count nouns.
6. Use general and specific articles and zero articles correctly.
7. Make subjects and verbs agree.
8. Write simple sentences, identifying the basic sentence elements.
9. Use capitals correctly with proper nouns and sentence beginnings.
10. Identify common spelling patterns.

11. Use correct end punctuation, commas with introductory clauses and items in a series, apostrophes in possessives.
12. Write paragraphs with topic sentences, supporting ideas, and concluding sentences.
13. Edit paragraphs for grammar and sentence structure.
14. Write a variety of paragraph types (descriptive, narrative, classification/division).
15. Use correct paragraph format.

It is essential that all grammatical structures be practiced in both written and oral exercises. There should be a focus on both learning and acquisition, understanding and application, fluency and accuracy. Students should be encouraged to apply structures learned in meaningful contexts.

ESL092 - Inter Struct & Composition

Overview

Course Description
Non-native speakers of English continue building on the grammar/structure foundation begun in ESL 091 (Basic Structure of Written English), concentrating more at the sentence and discourse level (use of subordination and coordination, adverb, adjective, and noun clauses, transition works and expressions). They continue developing an understanding of the writing process, moving from the paragraph and unstructured essays to more structured academic essays and reports. Focus on writing at this level moves from fluency to accuracy.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ESL091 Basic Structure of Written Eng

Learning Objectives

Learning Objectives
1. Demonstrate understanding of conventional rules of mechanics

a) capitalization

b) basic punctuation

c) spelling

2. Distinguish complete sentences from clauses, fragments, run-ons, comma splices

3. Identify key parts of sentences (subject, verb, direct and indirect object, prepositional phrases, modifiers, connectors)

4. Use variety of sentence-combining techniques to show relationships between ideas:

a) Use coordinating/correlative conjunctions to join clauses and sentence parts

b) Use adjective clauses to add subordinate information

c) Use adverb clauses to express cause and reason, time, opposition, and condition

d) Use variety of transition expressions to show addition, cause/reason, opposition, and condition

e) Use noun clauses with if/ whether, interrogative words, and that

5. Use a variety of clause reduction techniques

a) Reduce adjective clauses to participial phrases, prepositional phrases,

b) Reduce adjective clauses to appositives

c) Reduce adverb clauses to participial and prepositional phrases

6. Use verbs and verbals correctly and appropriately

a) Use the appropriate verb tense and form in both active and passive voice

b) Use gerunds and infinitives appropriately

c) Use separable (fill out) and non-separable (look after) phrasal verbs correctly

d) Use causative structures (have, make, let, get to)

e) Use sequence of tenses when necessary after verbs of report

7. Demonstrate an understanding of the writing process to write academic essays

a) Use a variety of pre-writing strategies to prepare to write academic essays (brainstorming, outlining, reading, discussion, free-writing)

b) Use informal journal writing to generate ideas for formal essay writing

c) Use peer and group editing and revision strategies

8. Write academic essays that include

a) an introductory paragraph

b) a clear thesis statement

c) several body paragraphs

d) a concluding paragraph

e) evidence of editing and revision

9. Use a variety of rhetorical patterns of organization

a) Comparison/contrast

b) Cause/effect

c) Narrative

d) Process

e) Classification/division

ESL094 - Speak Clearly in English

Overview

Course Description
Designed for nonnative students with marginal verbal skills in English. Listening skills are practiced through note taking, dictation and aural comprehension exercises during class. Oral presentations and group discussions provide opportunities for students to express opinions and ideas. Emphasis is on developing fluency and confidence.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
After completion of ESL 094, Speaking Clearly in English, students will be able to

1. Listen to and comprehend conversations, presentations, video and audio material on diverse topics ranging from personal to academic.
2. Carry on sustained and fluent conversations in realistic settings to achieve specific communicative goals.
3. Use discourse strategies such as requesting, stating opinions, clarifying, objecting, asserting, agreeing and disagreeing.
4. Begin to monitor grammar use.
5. Speak with appropriate intonation for statements, questions (yes/no, information).
6. Develop confidence by speaking in a variety of situations in small and large groups, and in front of the whole class.
7. Participate actively and effectively in small group discussions.
8. Solve problems through group discussions.
9. Summarize results/main points of discussions.
10. Use vocabulary appropriate to situation.
11. Expand oral vocabulary.

12. Make presentation(s) on topics, such as self, family, culture, home country.
13. Interview and be interviewed on a variety of topics.
14. Give and follow oral directions.
15. Gather and present information researched from newspapers, magazines, the Internet and other sources on an assigned topic.
16. Access available library, support services, and Internet resources for developing speaking and listening.
17. Watch and discuss movies, news, and TV shows.
18. Use appropriate telephone skills.

ESL095 - Speak Effectively in English

Overview

Course Description
Academic speaking course designed for nonnative students with proficient verbal skills in English. Listening comprehension, note taking, and aural comprehension experiences are practiced during class to prepare students to understand classroom lectures. Students practice conversational skills through oral presentations and problem solving discussion in which they must present and substantiate their opinions. Emphasis is on verbal responses which are grammatically correct and appropriate for academic situations.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ESL094 Speak Clearly in English

Learning Objectives

Learning Objectives
1. Take effective notes based on classroom lectures, taped lectures, group discussions
2. Respond orally to academic prompts based on readings, lectures, and videos.
3. Carry on whole class and group discussion on a variety of personal and academic topics
4. Speak with appropriate language accuracy (grammar and structure, vocabulary)
5. Provide clear, accurate descriptions of people, places, settings, and processes
6. Make an individual presentation related to chosen field of work or study, focusing on clear academic language.
7. Interview professors, students, and others in the academic culture and present results formally in class using appropriate visuals
8. Solve problems in groups
9. Make a group presentation on an academic topic based on internet research
10. Gather and present information events researched from newspapers, magazines, the Internet, and other sources on an assigned topic or current events
11. Access materials available in the library, support services, and online that develop academic speaking and listening skills.
12. Explain charts and graphs using appropriate structures and vocabulary.
13. Monitor and self-correct grammatical errors
14. Use style and register appropriate to the situation.

ESL096 - Accent Reduction

Overview

Course Description
ESL Reading I is designed for nonnative students with minimal reading ability and a limited English vocabulary. Vocabulary expansion and reading comprehension skills are presented in class and applied to textbook assignments. Identifying topic and main idea, improving literal comprehension and determining meaning from context are emphasized. Students practice these skills with a variety and receive individual assistance with specific reading needs during lab sessions.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ESL095 Speak Effectively in English

Learning Objectives

Learning Objectives

1. Produce vowels and consonants more clearly in individual words
2. Produce reduced vowels and assimilated consonants in extended speech
3. Use word and sentence stress patterns appropriately
4. Produce basic intonation patterns for statements, questions, exclamations, commands
5. Produce intonation patterns to express contrast, emphasis, choice, clarification, surprise, denial
6. Identify syntactic phrases and clauses and produce them as units
7. Use thought-grouping to produce speech that is more comprehensible
8. Use IPA (International Phonetic Alphabet) and dictionaries for individualized self-study
9. Identify their own pronunciation problems and work on them individually
10. Be more confident in oral communication in a variety of social, educational, professional settings
11. Use relaxed and reduced speech in appropriate environments
12. Use nonverbal communication appropriately to support comprehensibility

ESL097 - Skills for Effect Reading

Overview

Course Description
ESL 097 helps students improve reading strategies for a wide variety of materials by focusing on decoding skills, word meanings, identifying main ideas and supporting details. Students apply skills and respond in writing and group discussions to a variety of text readings, as well as fiction selections and news articles.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Identify stated and implied main ideas
2. Identify supporting details
3. Use a variety of strategies to determine meaning of new vocabulary

a. Vocabulary from context

b. Word forms (prefixes, suffixes, roots)

c. Dictionary use

d. Synonyms and Antonyms

4. Recognize phrasal verbs and idioms as units
5. Draw interferences and conclusion from texts
6. Recognize author's intended audience and purpose
7. Select and use appropriate reading strategies based on reader's purpose

a. Skimming, Scanning, SQ3R

8. Identify various styles of testing questions and apply appropriate strategies
9. Demonstrate comprehension of readings by

a. Summaries (oral and written)

b. Group discussions

c. Written reactions

d. Responses to teacher -generated questions

10. Demonstrate increase in reading speed and fluency
11. Select appropriate books for outside reading
12. Attend to background and cultural topics that impact reading comprehension

ESL098 - Intensive Reading in English

Overview

Course Description
ESL 098 provides nonnative speakers of English with the reading strategies and skills needed for academic reading in the content areas, with an emphasis on the development of academic vocabulary. Students use actual college text readings to increase proficiency in analyzing content area passages by focusing on advanced reading skills such as making inferences, drawing conclusions, and identifying organizational patterns, Students are introduced to the elements of fiction through in-class presentations and discussions and extensive assigned reading.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ESL097 Skills for Effect Reading

Learning Objectives

Learning Objectives
1. Apply reading strategies from Skills for Effective Reading in English (ESL 097)

2. Apply appropriate reading strategies to academic classroom tasks

a. College textbooks

b. Essay test questions

c. Written instructions

d. Academic articles

3. Recognize and understand academic language

a. Figurative language

b. Metaphors and similes

c. Phrasal verbs and Idioms

d. Specialized content-based vocabulary and jargon

4. Identify and apply appropriate reading strategies to a variety of genres

a. Novels

b. Short stories

c. Academic articles and essays

d. Academic texts chapters

5. Demonstrate comprehension of readings by

a. Summarizing (oral and written)

b. Participating in group discussion

c. Writing reactions

d. Answering teacher generated questions

6. Use text information for the completion of academic tasks

7. Use critical reading strategies

a. Distinguish fact form opinion

b. Identify purpose, tone, and audience

c. Evaluate logic and arguments

d. Identify rhetorical patterns of organization

e. Recognize author bias

f. Analyze literary analogies

8. Identify basic elements of fiction

a. Characterization

b. Setting

c. Plot

d. Tone and mood

9. Attend to background and cultural topics that impact reading comprehension

ESL251 - English for Academic Purposes

Overview

Course Description
Prepares advanced non-native English language learners for the academic reading and writing tasks they will face in an academic/professional settings. In this integrated multi-skills course, students continue to develop their ability to read and write critically in order to prepare for the language demands of college classes. Students complete various intensive academic writing assignments and other language activities to improve both accuracy and fluency in English. Grammar, sentence structure, and writing organization are emphasized. American cultural values and academic culture are a core topic integrated into the reading and writing activities.

Total Credits

Total Credit Hours:
6

Billing Hours

Billing Hours Min:
6

Lecture Hours

Lecture Hours (per week):
6

ESL297 - Special Topics

Overview

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

EXS101 - Intro to Exercise Science

Overview

Course Description
This course will provide a basic overview of the field of exercise science and associated professions which include: exercise physiology, sports nutrition, biomechanics, athletic training, exercise and sport psychology, and motor behavior. This course will also cover the professional activities such as professional organizations, certifications, professional issues, and professional liabilities that are related to these professional applications.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Identify and describe the career options in the field of exercise science.
2. Demonstrate basic knowledge and understanding of the various body systems.
3. Explain the differences between certification, licensure, and registration in the field of exercise science.
4. Apply basic principles of assessment in exercise science.

EXS102 - Exercise Measurement &Prescrip

Overview

Course Description
Teaches the student how to evaluate and prescribe exercise to a variable population. The course covers aspects of health related fitness components (cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition) and how to assess each of these components. The course also covers liability, certifications, and safety procedures that are relevant to the fitness industry.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Math Placement - Intro Level

Advisement Comments
Coreq: BIO 164

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Recognize the basic concepts of health screening and risk stratification as they are applied to exercise assessment and exercise programing.	
2. Explain the differences between assessment of cardiorespiratory, muscular strength and endurance, flexibility, body composition and balance components of fitness.	
3. Apply basic principles of exercise programing to cardiorespiratory and musculoskeletal systems as they pertain to fitness components.	

EXS103 - Methods of Instructers Traing

Overview

Course Description

This course introduces methods of group exercise instruction and the science/art of personal fitness training. The course presents research-based information on a variety of group exercise modalities, as well as effective methods and strategies for an individualized personal training program. Special emphasis is on the planning of group exercise classes and on providing students with opportunties to teach and/or lead group exercise classes. In addition, all facets of personal exercise training are examined; specifically, individualized program design and instruction.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

EXS102 Exercise Measurement &Prescrip, BIO164 Anatomy & Physiology II

Advisement Comments

Prereq: BIO 164 with a grade of C or better

Learning Objectives

Learning Objectives

1. Students will be able to identify the major components in the field of profession personal training.
2. Students will be able to apply the basic science of behavior modification, client screening, and initial client consultation to personal training.
3. Students will be able to demonstrate the process of client screening, risk classification for fitness assessment and developing an exercise program
4. Students will be able to demonstrate knowledge and understanding of business basics and planning, legal issues and responsibilities as they apply to the business of personal training.

EXS107 - Care & Prevent Athletic Injury

Overview

Course Description

The study of the treatment and prevention of specific sport injuries resulting from activities in the home, recreational, intramural, and extramural settings. Topics include identification of injuries, proper treament after they occur, and preventative measures. Students will learn how to create a safe environment for athletes. American Red Cross techniques will be covered.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Describe mechanisms of tissue trauma	Communicate effectively Participate cooperatively within a team
2. Demonstrate understanding of the anatomy of shoulder, hip, knee, ankle and vertebral joints of the body	Communicate effectively Participate cooperatively within a team
3. Describe common injuries associated with particular body parts	Communicate effectively Participate cooperatively within a team
4. Describe conditioning methods of rehabilitation and injury prevention	Communicate effectively
5. Describe nutritional, pharmacological and therapeutic methods of injury rehabilitation	Communicate effectively

EXS108 - Sport Nutrition

Overview

Course Description

This course is designed for students in exercise science or other students with an interest in the role of nutrition in supplying energy for various forms of physical activity. Topics include: physiological role of macronutrients in aerobic and anaerobic energy supply, micronutrients, fluid intake, commercial supplements, body composition, and disordered eating problems of athletes.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
EXS101 Intro to Exercise Science

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Students will be able to recognize nutritional needs of various athletic populations.	Program #4 Recognize how the body works and how it is affected by environmental factors
2. Students will be able to explain the physiological role of macronutrients and micronutrients for different types of physical activity.	Program #4
3. Students will be able to recognize and describe the role of fluid intake in maintaining hydration and sport performance in an active population.	Program #4
4. Students will be able to make recommendations proper body composition and individuals with disordered eating problems in an athletic population.	CWC #1 Think Critically

FRN105 - College French I

Overview

Course Description
This course is offered to beginners and to some non-beginners who have had perhaps one year of French in high school, but who feel that their preparation is inadequate for an intermediate course at the college level. The basic communication skills are systematically developed: listening and speaking skills are emphasized in the classroom and expanded with participation in a language tape program. Reading and writing skills are progressively developed through various creative exercises, activities and assignments. Cultural readings and materials are adapted to provide the student with the opportunity to practice communication skills while at the same time discovering aspects of both daily life and traditional culture of Francophones all over the world and within the United States.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. The ability to reproduce accurately the sounds and intonations of the French language.
2. The ability to comprehend a broad passive vocabulary and to use an active vocabulary of at least 250 words centering on controlled areas (i.e., objects, places, physical descriptions, family members, sports, and games).
3. The ability to communicate simple exchanges, asking and answering simple questions relying on learned vocabulary and phrases.
4. The ability to comprehend without translation selected readings.

5. The ability to understand and use effectively the present tense of some regular and irregular verbs, the immediate future, the use of adjectives, nouns, some pronouns, numbers, and comparisons.

6. The ability to develop their own self-expression in French as they use and readily understand high frequency commands, questions, and courtesy expressions.

7. The ability to spell correctly in French and to understand the use and effect of accents on French letters.

8. The ability to write accurate and effective French sentences in response to written questions from the text as well as assigned paragraphs.

9. The ability to imitate typically French gestures in communicating.

10. The ability to appreciate some French literature, music, and typically French cultural attitudes.

FRN106 - College French II

Overview

Course Description
A continuation of College French I, this course will develop the basic communicative skills for beginning students of French. Emphasis will be placed again on enabling the student to develop proficiency in the basic skills essential to communicate language learning: listening, speaking, reading and writing in French as well as gaining familiarity with French culture abroad and in North America.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
FRN105 College French I

Learning Objectives

Learning Objectives
1. The ability to reproduce accurately the sounds and intonations of the French language.

2. The ability to comprehend a broad passive vocabulary and to use an active vocabulary of at least 750 words centering on controlled areas, such as weather expressions, days, months and seasons, university life, and clothing.

3. The ability to communicate elementary exchanges, asking and answering simple questions relying on learned vocabulary and phrases.

4. The ability to read for broad comprehension without translation selected cultural and literary readings.

5. The ability to understand and use effectively the present tense of more regular and irregular verbs, reflexive verbs, the two past tenses of some verbs, the use of direct and indirect object pronouns, interrogative and negative terms, and the use of pronouns in commands.

6. The ability to use the French alphabet in oral spelling and to correctly use accents in all written work.

7. The ability to write accurate and effective French sentences in response to written questions from the text as well as in a personal experience essay.

8. The ability to imitate typically French gestures in communicating.

9. The ability to appreciate some French literature, music, and typically French cultural attitudes.

FRN205 - College French III

Overview

Course Description
A continuation of FRN 106, this course provides review and further study of French grammar and vocabulary. Students are immersed in French language and culture, and given opportunities to apply listening and speaking skills to a variety of contexts. Reading strategies are emphasized and fundamentals of composition are presented in conjunction with appropriate literary texts.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
FRN106 College French II

Learning Objectives

Learning Objectives
1. Handle situations encountered in travel, professional and social contexts.
2. Express opinions about a variety of topics using a wide range of verb forms and correct French intonation and pronunciation.
3. Read and comprehend general content and factual information in newspaper and magazine articles, public announcements, advertisements and level appropriate literary selections.
4. Write a composition on a familiar topic using a wide range of verb forms with correct grammar and syntax.
5. Describe and explain the norms, values and beliefs of French-speaking cultures.

FRN206 - College French IV

Overview

Course Description
A continuation of FRN 205, this course provides extensive practice in speaking, listening, reading and writing skills. Fluency is developed through thoroughly expanded grammatical concepts, and idiomatic expressions. Effective skills for understanding and interpreting more advanced literary texts are presented. Students will study the culture of French speakers all over the world.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
FRN205 College French III

Learning Objectives

Learning Objectives

1. Communicate facts and explain points of view of more complex topics.
2. Maintain a discussion in French with correct grammatical and pronunciation accuracy.
3. Understand and analyze more complex literary texts.
4. Write a composition using correct syntax and vocabulary, and following the writing process.
5. Describe and explain the norms, values and beliefs of French-speaking cultures.

GEO110 - Cultural Geography

Overview

Course Description
The course is organized to present a view of the scope of cultural geography. The unifying philosophical question highlights the interactions between physical and cultural factors on Planet Earth. Ideally, the student will be aided in developing a better appreciation of the complex reasons for cultural diversity, cultural conflict, and observed differences in levels of economic development. Emphasis is given to an understanding of the holistic approach in solving problems facing the human race and its interaction with the environment.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives
To establish the value of the geographic viewpoint in interpreting the changing world.

To identify and explain interrelationships of geography and culture.

To demonstrate an understanding of the critical role of cultural perceptions in resource development and resource utilization planning.

To examine and determine the role of geography in planning for resource utilization and the need for a holistic viewpoint regarding humans and their relationship to the environment.

GEO115 - World Regional Geography

Overview

Course Description
This course is an introduction to the location, distribution, and spatial organization of major realms, regions, and countries of the world. Emphasis will be place on physical features, cultural patterns, political histories, and economic development, and how increasing globalization influences the geographic areas of the world. Current geographic issues associated with each area will be addressed. Utilizing the holistic approach of geography, students will be able to better explain the "why" and "where" of the peoples and places of the world.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level

Learning Objectives

Learning Objectives
To demonstrate the development of a global place-name framework.

To identify and explain interrelationships of the geographic realms and regions of the world.

To demonstrate an understanding of the many elements influencing the spatial locations of peoples and places of the world.

To develop and formulate better comprehension of the complex issues associated with increasing globalization, and how it influences the world around us.

GEO260 - Independent Study-Geography

Overview

Course Description
Reading, research, and/or experimentation on topic (not otherwise covered in college social sciences curriculum) selected in consultation with a faculty member. Special attention is to be given to the particular abilities and interest of students, with individual guidance for advanced studies. The student may choose: research on selected problems, supervised field studies, reading program, among other alternatives. The course maybe a group of students as well as individual study. The course may be repeated for credit. The student is responsible to adhere to the college policies and procedures for independent study.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
The nature of the course is by definition highly variable. Thus specific behavioral objectives are part of student(s) agreement with the cooperating faculty member. The generic behavioral objectives which are expected include:

1. Student(s) should demonstrate ability to state a problem and rationale for wanting to investigate the particular problem.
2. Student(s) should demonstrate initiative, ability to follow through, and thoroughness of literature research and/or reading.
3. Student(s) should demonstrate

- appropriateness of research design
- completeness of reading list
- correctness of a field study approach and method

1. Student(s) should demonstrate a collegiate presentation of results, findings, ideas, and conclusions.

GRM101 - Spoken German for Travelers

Overview

Course Description
This course in basic conversational German is for beginners who have little or no formal knowledge of the language. Lessons on grammar and usage are taught only as they affect everyday conversation, and the course emphasis is on real-life situations. The course also introduces the students to the cultural life of German-speaking countries, and will include useful information about Germany, Austria, and Switzerland. Students will practice dialogues they may encounter in traveling to Germany.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
1. The ability to speak and understand German in familiar conversations.
2. The ability to understand basic German grammar and vocabulary.
3. The ability to appreciate German culture, traditions, customs, and manners.

GRM105 - College German I

Overview

Course Description
This course is an introduction to the German language with emphasis on speaking, reading, writing, and understanding. Focus will be on grammar, usage, vocabulary, pronunciation, and comprehension. The course includes a tape program component. The course is designed for students who are beginning their study of German, or for those who have had one year or less of German in high school.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives
1. The ability to understand German spoken in a conversation involving familiar vocabulary.
2. The ability to write simple sentences and compositions.
3. The ability to comprehend and appreciate selected cultural readings.
4. The ability to appreciate German culture, tradition, manners, and customs.

GRM106 - College German II

Overview
Course Description
A continuation of College German I, the course will emphasize speaking, reading, writing, and comprehension of the language. Focus will be on grammar, usage, vocabulary, comprehension, and pronunciation.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
GRM105 College German I

Learning Objectives
Learning Objectives
1. A greater understanding of spoken conversational German involving familiar vocabulary.
2. A greater proficiency in reading and writing simple and moderately complex sentences and compositions.
3. A greater proficiency in comprehending and appreciating cultural readings.
4. A deeper appreciation of German culture, tradition, customs, and manners.

GRM205 - College German III

Overview

Course Description
A continuation of College German II, this course further develops basic skills in aural comprehension, speaking, reading, and writing. Basic grammatical concepts will be reviewed, and more complex grammatical concepts will be introduced. Emphasis will be placed on acquiring oral and written fluency through classroom exercises and assignments.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
GRM106 College German II

Learning Objectives

Learning Objectives
1. use correct grammar and sentence structure to write paragraphs and short essays on selected topics
2. demonstrate comprehension of spoken German in dialogues and stories on video/DVD/audio cassette/CD by responding to questions based on these media.
3. demonstrate comprehension of intermediate-level, non-technical German prose by responding orally and in writing to questions about content and themes
4. use context clues to determine possible answers to inference questions based on prose passages.
5. participate actively in discussions comparing German culture with their own culture.
6. use the Internet to research topics for group presentations and class discussions of assigned topics.
7. demonstrate an understanding of the contemporary culture of German speaking communities.

GRM206 - College German IV

Overview

Course Description
A continuation of College German III, this course further develops oral and written fluency in the German language through lecture presentations on grammar and idiomatic expressions, cultural and literary reading selections, and oral and written classroom exercises and assignments.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
GRM205 College German III

Learning Objectives

Learning Objectives
1. use correct grammar and sentence structure to write essays and reactions on selected pieces of literature and other readings on topics in business and the humanities

2. write a research paper related to literary readings or other selected topic

3. demonstrate accurate comprehension of spoken German in discussions and stories on video/DVD/audio cassette/CD by responding to questions based on these media.

4. respond with greater accuracy both orally and in writing to question on selected literature and readings.

5. use the Internet and library recompound and complex forms with coordinating and subordinating conjunctions and relative pronouns, conditional sentences.sources to research topics for group presentations

6. demonstrate through discussion and writing an understanding of contemporary cultural topics presented

HAC104 - Basic Electricity

Overview

Course Description
HAC 104 is a series of lectures and lab experiences designed to familiarize the beginning technician with the electrical principles as they relate to alternating and direct current, the operation of various types of circuits, and basic wiring diagram (schematic) reading and drawing. Other topics for consideration include concepts and principles of generating and distributing electricity and electrical circuitry; safety; basic circuit characteristics, Ohm's Law and Watt's Law.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Explain how and why electricity works.	Use basic laws of physics
2. List electrical safety considerations	Demonstrate basic shop safety to operate and maintain tools and test equipment.
3. Safely use and care for electrical test meters	Demonstrate basic shop safety to operate and maintain tools and test equipment.
4. Measure electrical quantities	Use basic laws of physics
5. Identify various types of electrical schematics	Demonstrate basic shop safety to operate and maintain tools and test equipment.
6. Draw and read simple pictorial, ladder, and schematic diagrams	Demonstrate basic shop safety to operate and maintain tools and test equipment.
7. Wire series, parallel, and complex circuits from diagrams	Demonstrate basic shop safety to operate and maintain tools and test equipment. Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry
8. Use Ohm's Law and Watt's Law to predict electrical outcomes	Use basic laws of physics.
9. Wire transformers, relays, and solenoids from wiring diagrams	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry. Demonstrate basic shop safety to operate and maintain tools and test equipment.

HAC119 - Construction Print Reading

Overview

Course Description

HAc 119 is an introduction to the basic principles used by architects and draftsmen to make architectural and structural drawings. It is designed for the student who desires a basic knowledge of blue print reading and construction knowledge, as well as those who will enter the construction, electrical, or HVAC fields. Topics will include views, scales, symbols, projection, footings and foundations, notations and elevations. Structural and trade specific information used in residential and light commercial building construction will be used to solve possible problems that may be encountered.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

At the completion of HAC 119, the student will be able to complete the following with a minimum of 75% accuracy:

1. Explain blueprint terminology
2. Make measurements with an architectural scale
3. Identify building materials and their use from prints
4. Understand the importance and use of specifications (specs) in construction

5. Identify terms & symbols used with plot plans
6. Read / interpret framing and finish blueprints
7. Read / interpret plumbing, electrical and HVAC system from residential / commercial prints.
8. Develop isometric drawings from floor plans
9. Draw a floor plan to scale from a rough drawing.
10. Develop teamwork skills by working on group projects

HAC125 - Piping and Hydronics

Overview

Course Description
HAC 125 will provide the student with the background and skills to perform various piping operations pertinent to heating field. Topics to be covered include basic and specialty tools used for copper, black iron, copper-finned baseboard, and steam radiation. Piping layout, hydronic heating systems sizing, zoning, hot water and steam boiler piping, Hydronic controls and radiant heat layouts will be covered.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives
Upon completion of HAC 125, the student will be able to complete the following with a minimum of 75% accuracy:

1. Join pipes and tubing with solder and brazed joints within specifications.
2. Determine the piping arrangements to be leak-free using various methods.
3. Calculate heat loss for hydronic heating applications
4. Determine necessary water flow rates for hydronic heat system
5. Size the piping to match the needed flow rates
6. Determine outdoor and indoor design conditions
7. Design hydronic piping layouts for residential /commercial buildings from working blueprints
8. Design distribution system based on equipment pump performance
9. Diagnose problems with existing systems
10. Draw piping layouts to scale after the calculations are performed.

HAC131 - Air Conditioning & Refrig I

Overview

Course Description
HAC 131 will introduce the student to the theory and application of the basic refrigeration cycle as it applies comfort air conditioning equipment. This is the first of four air-conditioning courses and will cover air conditioning applications including installation and service of window air conditioners, split system residential air conditioners, packaged a/c units and light commercial systems. The student will be introduced to the refrigerants presently in use as well as alternative refrigerants and refrigerant oils.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC104 Basic Electricity

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify, use and maintain general and specialized hand tools used in the HVACR trade	Demonstrate basic shop safety to operate and maintain tools and test equipment.
2. Differentiate between the different types of tubing and fittings	Identify and list the components and their functions for the basic refrigeration cycle.
3. Properly use the tools to prepare the tubing within various specifications	Demonstrate basic shop safety to operate and maintain tools and test equipment.
4. Solder and braze copper tubing using an air-acetylene torch	Demonstrate basic shop safety to operate and maintain tools and test equipment. Install and service typical residential and light commercial HVACR equipment.
5. Detect leaks, evacuate, and charge copper projects and refrigeration systems	Identify and list the components and their functions for the basic refrigeration cycle. Demonstrate basic shop safety to operate and maintain tools and test equipment. Install and service typical residential and light commercial HVACR equipment.
6. Identify the refrigerants by use of temperature/pressure charts	Identify refrigerants by measuring temperature and pressure.
7. Properly handle and store refrigerants	Identify refrigerants by measuring temperature and pressure. Demonstrate basic shop safety to operate and maintain tools and test equipment. Install and service typical residential and light commercial HVACR equipment.
8. Explain the four types of heat and why they are important for a/c work	Perform heat loss/heat gain calculations. Use basic laws of physics.
9. Compare the refrigerant used to its cooling medium	Perform heat loss/heat gain calculations. Use basic laws of physics.
10. Measure condenser and evaporator temperatures	Perform heat loss/heat gain calculations. Use basic laws of physics.
11. Measure relative humidity	Perform heat loss/heat gain calculations. Use basic laws of physics.
12. Identify the basic components of a mechanical refrigeration system	Identify and list the components and their functions for the basic refrigeration cycle.
13. Explain the operation of metering devices	Demonstrate basic shop safety to operate and maintain tools and test equipment.
14. Adjust the various metering devices	Demonstrate basic shop safety to operate and maintain tools and test equipment.
15. Measure superheat and sub-cooling	Use basic laws of physics.
16. Explain the system's sequence of operation using wiring diagrams	Identify and list the components and their functions for the basic refrigeration cycle.
17. Set up a system to simulate design conditions	Identify and list the components and their functions for the basic refrigeration cycle. Install and service typical residential and light commercial HVACR equipment.
18. Test a system's pressure under design conditions	Demonstrate basic shop safety to.operate and maintain tools and test equipment. Install and service typical residential and light commercial HVACR equipment.
19. Install a filter-drier and sight glass	Install and service typical residential and light commercial HVACR equipment.
20. Install an air filter	Install and service typical residential and light commercial HVACR equipment.
21. Install a line set	Install and service typical residential and light commercial HVACR equipment.
22. Fabricate ductwork with sheet metal and / or fiberglass duct board	Install and service typical residential and light commercial HVACR equipment.

HAC132 - Air Conditioning & Refrig II

Overview

Course Description

HAC 132 discusses the theory and application of the basic refrigeration cycle as it applies to refrigeration. This is the second of a series of courses dealing with air conditioning and refrigeration covering refrigeration applications that includes installation and service of residential refrigerator and freezers, icemakers, walk-in coolers and freezers, and light commercial systems. The student will be introduced to the specialized components and controls needed for refrigeration systems. Included in this course is a field trip to witness first- hand the operation of supermarket rack and heat-reclaim systems.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

HAC131 Air Conditioning & Refrig I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Differentiate between limit controls and safety controls	Identify and list the components and their functions for the basic refrigeration cycle.
2. Wire various limit and safety controls	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
3. Identify various types of electrical schematics	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
4. Draw, read, and/or trace simple pictorial, ladder, and schematic diagrams	Identify and list the components and their functions for the basic refrigeration cycle.
5. Compare unit amperage with nameplate data ratings	Install and service typical residential and light commercial HVACR equipment. Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
6. Check and adjust defrost controls and timers, metering devices, and unit refrigerant pressures	Install and service typical residential and light commercial HVACR equipment. Demonstrate basic shop safety to operate and maintain tools and test equipment.
7. Install refrigerant line accessories (i.e. filter-drier; sight glass; etc.)	Install and service typical residential and light commercial HVACR equipment. Demonstrate basic shop safety to operate and maintain tools and test equipment.
8. Adjust pressure controls to match the application	Install and service typical residential and light commercial HVACR equipment. Demonstrate basic shop safety to operate and maintain tools and test equipment.
9. Explain the different methods for maintaining head pressure in low ambient conditions	Use basic laws of physics. Identify and list the components and their functions for the basic refrigeration cycle.
10. Dismantle and re-assemble a semi-hermetic compressor	Install and service typical residential and light commercial HVACR equipment
11. Differentiate between an evaporator used for low or medium temperature applications	Install and service typical residential and light commercial HVACR equipment
12. Adjust EPR and CPR valves	Install and service typical residential and light commercial HVACR equipment
13. Adjust the water regulating valve used on a water cooled condenser	Install and service typical residential and light commercial HVACR equipment
14. Explain the methods used in heat reclaim systems	Demonstrate basic shop safety to operate and maintain tools and test equipment. Use basic laws of physics. Identify and list the components and their functions for the basic refrigeration cycle.
15. Install, adjust, and maintain icemakers, residential refrigerators and/or freezers, self container store refrigeration units	Install and service typical residential and light commercial HVACR equipment
16. List the proper storage temperature and relative humidity for various commodities	Size and lay out air distribution and hydronic piping systems. Perform heat loss/heat gain calculations.
17. Differentiate between high, low, and medium temperature applications	Size and lay out air distribution and hydronic piping systems. Perform heat loss/heat gain calculations.
18. Calculate the correct head pressure for air cooled equipment	Use basic laws of physics. Identify refrigerants by measuring temperature and pressure.
19. Test a compressor for inefficiency by calculating compression ratios	Use basic laws of physics. Use basic math functions typical to a business environment. Demonstrate basic shop safety to operate and maintain tools and test equipment.
20. Perform a compressor vacuum test	Use basic laws of physics. Use basic math functions typical to a business environment. Demonstrate basic shop safety to operate and maintain tools and test equipment.

HAC135 - Domestic Oil Burners

Overview

Course Description
HAC 135 introduces the student to the application and systematic approach to understanding the operation, maintaining, servicing and installing residential oil burner systems. This course will give the students the necessary skills to perform annual maintenance on modern oil burner systems. Included will be discussions on types of fuel oil, high-pressure burners, basic electrical wiring diagrams, electrical components, anc combustion testing and start-up procedures. Sizing nozzles, combustion chambers, and fuel pumps, piping oil tanks, testing fuel units, and general troubleshooting techniques will be covered.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC104 Basic Electricity

Learning Objectives

Learning Objectives
Upon completion of HAC 135, the students will be able to perform the following skills with a minimum of 75% accuracy:

1. Remove and replace an oil nozzle
2. Set and adjust electrodes on a nozzle assembly
3. Change an oil filter
4. Remove, replace, test and adjust a fuel pump
5. Test the vacuum for a fuel pump and size the pump accordingly
6. Clean/Replace the fuel pump strainer
7. Remove, test, and replace an ignition transformer
8. Remove, test, and replace an oil burner motor
9. Remove, test, and replace a cad cell
10. Remove, test, and replace a cad cell primary control
11. Strip down, clean, and re-assemble a high pressure oil burner
12. Size a combustion chamber
13. Size a nozzle to match the combustion chamber
14. Understand and discuss the methods for making various grades of fuel oil
15. Explain basic electrical wiring as it relates to oil burners
16. Differentiate between limit controls and safety controls
17. Wire various limit and safety controls
18. Wire an oil burner from wiring diagrams
19. Adjust the primary air of an oil burner for clean operation
20. Discuss the principles of combustion testing and interpret the results of a combustion test

21. Discuss the need for, and practice, proper venting procedures
22. Develop a plan for pre-season maintenance and testing
23. Maintain service records
24. Develop good customer relation skills

HAC140 - Electrical Maintenance I

Overview

Course Description
HAC 140 is a continuation of the basic electricity course that is designed to help the student understand electrical circuits as they relate to the HVACR equipment. Topics include safety and operating switches; alternating current circuitry; single- and three-phase transformers and motors; relays, contractors, and solenoid switches; control and timer circuits, wiring diagrams and symbols; and open motor and hermetic compressor testing. Electronic controllers used in the HVACR industry will be introduced to the student.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC104 Basic Electricity

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Differentiate between limit controls and safety controls	Identify and list the components and their functions for the basic refrigeration cycle.
2. Wire various limit and safety controls	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
3. Identify various types of electrical schematics	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
4. Draw and read simple pictorial diagrams	Identify and list the components and their functions for the basic refrigeration cycle.
5. Draw and trace simple ladder diagrams	Identify and list the components and their functions for the basic refrigeration cycle.
6. Draw and trace simple schematic diagrams	Identify and list the components and their functions for the basic refrigeration cycle.
7. Wire various heating systems from their schematics	Install and service typical residential and light commercial HVACR equipment. Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
8. Wire A/C and heat pump units from their schematics	Install and service typical residential and light commercial HVACR equipment. Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
9. Wire refrigeration units from their schematics	Install and service typical residential and light commercial HVACR equipment.Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
10. Identify the terminals and wire heating / cooling thermostats	Install and service typical residential and light commercial HVACR equipment. Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
11. Install transformers, relays and solenoids	Install and service typical residential and light commercial HVACR equipment. Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
12. Wire limit and safety switches	Install and service typical residential and light commercial HVACR equipment. Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.

HAC145 - Adv Air Conditioning & Refrig

Overview

Course Description

The students will study and apply psychrometrics and HVAC duct system design using manual and computer based load calculations. HAC-145 deals with application, installation and maintenance of HVAC equipment in residential, commercial and light industrial environments. Topics will include heating/cooling load estimating, air distribution and balancing, duct design and fabrication, and psychrometic operations.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites
HAC119 Construction Print Reading, HAC132 Air Conditioning & Refrig II

Learning Objectives

Learning Objectives
Upon completion of HAC 145, the student will be able to perform the following tasks with a minimum 75% accuracy:

1. Use psychrometric charts for HVAC system design or troubleshooting.
2. Calculate heat loss / heat gain for heating, air conditioning, and refrigeration applications
3. Determine outdoor and indoor design conditions
4. Design duct layouts for residential and commercial applications from working blueprints
5. Design air distribution system based on equipment fan performance
6. Fabricate duct systems
7. Determine equipment type and size
8. Use pressure-enthalpy diagrams for refrigerant R-134a and R-22

HAC150 - Heating Systems

Overview

Course Description
HAC 150 studies the various types of heating systems available in this region today. The course is designed to use schematic diagrams to follow the sequence of operations of HVACR equipment in use today that incorporates the state of the art electronic ignition systems and solid-state controls. The operations of oil-fired, gas-fired, electric furnaces and heat pumps are covered. The subject of human comfort levels is an important component of this unit of study. Heating systems evaluation, zoning and hydronic heat conditions that affect human comfort and the basic laws of thermodynamics will complete the course of study.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC104 Basic Electricity

Learning Objectives

Learning Objectives
Upon completion of HAC 150, the student will be able to perform the following tasks with 75% accuracy:

1. Discuss how basic electricity and schematics relate to various heating systems
2. Differentiate between limit controls and safety controls
3. Wire various limit and safety controls
4. Wire an heating system from wiring diagrams
5. Discuss the principles of combustion testing
6. Discuss the need for, and methods to attain, proper venting procedures

7. Develop good customer relation skills
8. Identify various types of electrical schematics
9. Draw and read simple pictorial diagrams
10. Draw and trace simple ladder diagrams
11. Draw and trace simple schematic diagrams
12. Trace out the wiring for various heating systems
13. Strip down and re-wire various HVACR equipment according to the schematics
14. Test the electrical components of HVACR equipment
15. Identify the terminals and wire thermostats

HAC155 - Electrical Maintenance II

Overview

Course Description
This course is a continuation of the Electrical Maintenance I, with single- and three-phase electrical voltage systems, motors, controls, programmable logic control devices and components being covered. Emphasis will be placed on troubleshooting, maintenance and repair of three-phase controllers and motors, lighting system problems and HVACR equipment. The introduction of electronic devices, HVACR controls and energy management systems will also be discussed.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC140 Electrical Maintenance I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Install, wire, and troubleshoot single and three-phase motors	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
2. Install, wire, and troubleshoot single and three-phase electrical circuits	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
3. Install, wire, and troubleshoot single and three-phase motor controls	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.
4. Diagnose problems with single and three-phase electrical systems	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry. Install and service typical residential and light commercial HVACR equipment.
5. Service and repair electrical components in single and three-phase electrical systems	Follow the National Electrical Code (NEC) to install residential and light commercial wiring as it relates to the HVACR industry.

HAC160 - Residential Wiring

Overview

Course Description
HAC 160 provides the student with the background to apply the National Electrical Code (NEC) as well as instruction into the design and application of residential house wiring. Subject matter examines electrical layouts, installations, testing and maintenance of electrical circuits, types of wire and wiring devices used for new construction, garage and outdoor lighting, special purpose outlets and connections, reading floor plans as they relate to house wiring, service-entrance requirements, low voltage wiring, wiring HVAC systems, types of fixtures, and GFCI protection.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC119 Construction Print Reading

Learning Objectives

Learning Objectives
At the completion of HAC 160, the student will be able to perform the following tasks with 75% accuracy:

1. Identify and explain the electrical symbols used in residential floor plans
2. Apply the fundamental code requirements for calculating branch-circuit sizing and loading
3. Determine the minimum number of branch circuits and receptacle layout as per the NEC
4. Calculate floor area
5. Determine conductor size and type
6. Explain the concept of “voltage drop”, calculate “voltage drop” and explain why it occurs
7. Read residential floor plans
8. Layout and size low-voltage; remote-control systems
9. Layout security systems, alarms, and detectors as per the NEC
10. Apply the NEC requirements to calculate service-entrance equipment
11. Discuss advanced home automation systems

HAC203 - Heat Pumps

Overview

Course Description
HAC 203 is a course that deals with the complexities of heat pumps. The course covers air-to-air Heat Pump systems (Central and Mini-split units) and Heat Pump water heaters, Air Conditioning units (central units, window units, and Packages Terminal Air Conditioners (PTAC units)). Both components include installation, start-up procedures, servicing, and yearly maintenance. The course combines hands-on experiences to compliment the technical learning.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC150 Heating Systems

Corequisites
HAC125 Piping and Hydronics, HAC132 Air Conditioning & Refrig II, HAC140 Electrical Maintenance I

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Outline the theory and application of Heat Pump Technology	1, 2, 3	1, 3, 8
Illustrate knowledge of Heat Pump Components	4, 7	5
Demonstrate knowledge and correct use of Heat Pump Controls and Circuits	4,6 7, 8, 9, 10, 11	1, 3, 5, 8
Demonstrate Heat Pump Installation	12, 13, 14, 15	1, 3, 5
Demonstrate Heat Pump Start-up and Testing	12, 13, 17, 18, 19, 20, 21	1, 3, 5, 8
Demonstrate Heat Pump Servicing	12, 13, 17, 18, 19, 20, 21	1, 5

HAC204 - Gas Furnaces

Overview

Course Description
HAC 204 is a course that deals with the complexities of gas-fired heating systems. Installation, application and servicing these pieces of equipment is the focus of this course. Gas Heat covers topics ranging from fundamentals of combustion to the evolution high efficiency units. The course also covers boilers, warm air furnaces, water heaters, and on-demand gas water heaters. This includes start-up procedures and yearly maintenance. The course combines hands-on experiences to compliment the technical learning.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HAC150 Heating Systems

Corequisites
HAC140 Electrical Maintenance I

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Outline the theory and application of Gas Combustion Chemistry	1, 2	1, 3, 8
Illustrate knowledge of Furnace Components	3, 4, 8, 9	5
Demonstrate knowledge and correct use of Furnace Controls and Circuits	8, 9	1, 3, 5, 8
Demonstrate Furnace Installation	5, 6, 7	1, 3, 5
Demonstrate Furnace Start-up and Testing	7	1, 3, 5, 8
Demonstrate Furnace Servicing	11, 12	1, 5

HAC210 - HVACR Practicum

Overview

Course Description

Provide the student the "hands-on" personal experience in the HVACR field by working side by side with a working professional from a local company that performs service or installation work. Students will be required to assist the technician during the routines of a typical workday. The instructor must approve internships. Any student who is currently working for a registered HVACR company with at minimum of 500 hours experience will receive credit for this course upon written documentation by the employer.

Total Credits

Total Credit Hours:

2

Billing Hours

Billing Hours Min:

2

Other Hours

Other Total Hours:

8

Requirements

Prerequisites

HAC104 Basic Electricity, HAC119 Construction Print Reading, HAC131 Air Conditioning & Refrig I, HAC132 Air Conditioning & Refrig II, HAC140 Electrical Maintenance I, HAC150 Heating Systems

Learning Objectives

Learning Objectives

Upon completion of HAC 210; the student will be able to complete the following with a minimum of 75% accuracy:

1. Prepare an overview report of the typical workday
2. Analyze the systematic approach to troubleshooting or installation techniques
3. Prepare a time and material estimate for a typical job.
4. Work through various jobs while under supervision
5. Apply safety practices throughout all phases of the job
6. Consider customer needs.
7. Develop customer relation skills
8. Develop teamwork skills
9. Develop employer / employee relations

10. Develop communication skills (oral and written)

HAC250 - Commercial & Industrial Wiring

Overview

Course Description

Provides the student understanding and experience in the layout and construction of electrical circuits as they relate to commercial and industrial installations. Builds upon the knowledge and experience the student gained fron the Residential Wiring Course (HAC-160). Topics for consideration include electrical safety; commercial and industrial blueprint reading; feeder bus systems; signaling systems; site lighting; panel board selection and installation; and conduit bending.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

HAC160 Residential Wiring

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Read Commercial and Industrial blue prints	
2. Bend electrical metallic tubing (EMT) to specifications	
3. Calculate circuit loads for new commercial and industrial construction	
4. Calculate circuit loads to modify existing installations in commercial / industrial applications	
5. Use the National Electrical Code (NEC) as it relates to commercial / industrial applications	
6. Layout the wiring for signaling systems	
7. Layout the wiring for lighting systems	
8. Layout the wiring for communication systems	
9. Layout the wiring for emergency power systems	
10. Layout the wiring for heating, ventilation, cooling and filtration systems	

HCO101 - Administrative Strategies for Healthcare Professionals

Overview

Course Description

Health Care Management provides a framework for addressing management problems in health care organizations. It addresses the various types of health care organizations, provider and vendor contract management, strategic planning, information systems, operational and capital budgeting, human resource component, cultural proficiency, health care marketing, motivational, teamwork and leadership skills.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify and apply concepts and theories in health care management	#1
2. Identify technology critical to health care management operations	#1, 5
3. Identify and apply the necessary operational skills to effectively manage a health care practice	#1, 2, 3, 5
4. Demonstrate the ability to work productively with others in diverse teams	#2, 4, 7, 9
5. Demonstrate an understanding of all laws, regulations and compliance issues related to health care management	#1

HCO102 - Healthcare Management Practices and Technology

Overview

Course Description
This course is designed to provide an understanding into the key functions that are required within a medical office/practice setting. Students will gain knowledge into the functionality of the electronic medical record, compliance rules and regulations, HIPAA and privacy, clinical documentation, reimbursement, data analysis, fraud and abuse. Students will develop interpersonal skills to communicate effectively with providers and staff.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify and describe key functions within a medical office/practice	#1, 2, 5
2. Demonstrate an understanding of the ambulatory use of the electronic medical record and its functionality	#1, 2, 5
3. Develop techniques for effective communication with physicians and staff	#1, 2, 4
4. Demonstrate an understanding of all laws, regulations, and compliance issues	#1, 2, 9

HCO103 - Reimbursement for Healthcare Services

Overview

Course Description

This course is designed to provide an understanding into the different types of health insurances, benefits, rules and regulations as it applies to processing health/medical claims. It will also examine the Medicare Prospective Payment system, RBRVS, risk adjustment coding. Ambulatory payment classifications as it relates to coding, documentation and regulatory compliance.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify the different insurance types, benefits and claim requirements	#1, 2
2. Describe the different coding systems used and where each coding system applies	#1, 2
3. Apply concepts related to payment formulas and reimbursement methods to practical situations	#1, 4
4. Describe the basic steps in processing an insurance claim and define the information required on the claim	#1, 2, 9
5. Apply techniques for coding and documentation compliance	#1, 2, 9
6. Describe the rules and regulations related to insurance	#1, 2

HCO104 - Revenue Cycle Management

Overview

Course Description

The course is designed to explain the revenue cycle as it applies to any health care entry. it will identify the processes that are integral to the revenue cycle, how these processes should function, and how to identify problems with in the cycle. It will detail how to correct the problems and how to monitor and sustain a profitable revenue cycle.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites
HCO103 Reimbursement for Services

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify the operational tasks related to the revenue cycle	#1
2. Identify the components of quality and auditing within the revenue cycle	#1, 3
3. Demonstrate an understanding of all laws, regulations and compliance issues related to the revenue cycle	#1
4. Understand the role insurance plays with respect to reimbursement	#1, 3
5. Identify how technology contributes to the revenue cycle	#1, 5
6. Understand proper documentation and charge capture	#1, 9

HIS123 - US to Reconstruction

Overview

Course Description
The study of US history is the study of ourselves as human beings and our connection to the larger world and global historical trends. Such an understanding, explored through events such as the Enlightement, religious revivalism, the Revolution, reform movements, westward settlement and the Civil War will allow students to develop an insight into the dynamics and reciprocity of the individual and society. Students will ground their insights into human nature and American culture by gaining familiarity with this body of historical knowledge.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives
The concepts and events studied in this course are intended to emphasize past attitudes and situations in American history in order to promote a better appreciation of our past and present. Students should view the past and present with a critical mind and proper perspective. Through an understanding of America's foundations students will gain deeper insight into the complexity of cause and effect and be better equipped to apply their knowledge and insights, with tolerance, to the major issues of today. Specific objectives are:

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate an understanding the complex, evolutionary nature of American society.	
2. Develop a connection between historical events, trends and individuals and the present so as a method of understanding the relevance of historical study.	
3. Analyze and evaluate primary and secondary sources so as to improve one's ability to create logical and compelling positions, while simultaneously developing an understanding of competing interpretations of historical events.	
4. Identify important factual information necessary to connect events to the present and to create compelling positions.	
5. Analyze and interpret issues in American history in light of the racial, ethnic, cultural, economic and social diversity found within the United States.	

HIS124 - US Since Reconstruction

Overview

Course Description

The present is a result of the past. Apropos, students in this course will consider, analyze and gain insight into past events, people and trends that have contributed to the constitution of America's present. An accumulation of a body of knowledge, both necessary and useful, and including U.S. foreign policy from Western settlement through globalization, and domestic changes from urbanization and industrialization, racial and gender questions to enduring debates over political economy, will serve to supplement and support the intellectual skills on which this course will focus.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

The concepts and events studied in this course are intended to emphasize past attitudes and situations in American history in order to promote a better appreciation of our past and present. Students should view the past and present with a critical mind and proper perspective. Through an understanding of America's foundations they should appreciate cause and effect and be better equipped to apply their knowledge and insights, with tolerance, to the major issues of today. Finally, students should be able to formulate an understanding of what it means to be an American. Specific objectives are:

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate an understanding the complex, evolutionary nature of American society.	
2. Develop a connection between historical events, trends and individuals and the present so as a method of understanding the relevance of historical study.	
3. Analyze and evaluate primary and secondary sources so as to improve one's ability to create logical and compelling positions, while simultaneously developing an understanding of competing interpretations of historical events.	
4. Identify important factual information necessary to connect events to the present and to create compelling positions.	
5. Analyze and interpret issues in American history in light of the racial, ethnic, cultural, economic and social diversity found within the United States.	

HIS126 - History of Black America

Overview

Course Description
Introduces students to the contributions of African Americans. Course materials allow the class to examine the political, economic, social, and psychological experiences of African Americans and their impact on the culture and character of the United States from the early days in the Americas to the present.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Explain the short and long term impact of African American contributions to America's social, economic, and political life.	
2. Illustrate the nature and extent of African American culture as it related to industrialization and urbanization.	
3. Evaluate America's handling of its black population.	
4. Identify persons and events that stirred and suppressed African American consciousness and development.	

HIS130 - Western Civilization I

Overview

Course Description
A thematic oriented course surveying the origins, development, and formation of the Western world's major political, social, ecomonic, religious, and intellectual institutions to the dawn of the modern era. Special emphasis is given to four great antecedents of Western Civilization: Greek rationalism; Roman universality; Judaic - Christian ethics; and Celtic, Slavic, Germanic traditions. Western Civilization is defined as European civilization and it's remote origins in earlier civilizations located in Mesopotamia, the Nile Valley, and beyond. The course stresses the themes of continuity and change in the forging of and diffusion of Western Civilization. Attention is paid to the reciprocal influences of western and non-western cultures. Discussion, lecture, and inquiry methods aim at developing the student's appreciation of the Western historical perspective.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives
This course is an introduction to Western Civilization. It makes no attempt to cover all of Western history, or even any sizable portion, but aims at helping the student understand the major developments throughout the centuries that have combined to produce the world in which we live. The course is aimed at introducing a sense of the relevancy of history, increasing knowledge of dynamics of Western development, and promoting a respect for history as a discipline. The use of the problems approach emphasizes the controversy, both contemporary and modern, that surrounds most historical events, and gives each student a chance to become involved in those controversies.

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Recognize the diversity of influences upon western institutions, the diffusion of western civilization's institutions, and the influence of other civilizations on those institutions.	
2. Evaluate the Hebrew and Christian philosophical and religious contributions as antecedents of western civilization.	
3. Indicate the role of Renaissance and Reformation institutions in the transition of Europe toward modernity.	
4. Judge the consequences of European rising skepticism, its absolutism and developing constitutionalism, and presence overseas upon its institutions.	

HIS131 - Western Civilization II

Overview

Course Description
Beginning with a review of the foundations of Western Civilization the course stresses the principal ideologies and developments of Western Civilization from the dawn of the modern era to the contemporary scene. Special emphasis is placed upon the rise of the state system, the challenge of nationalism and secularism, the industrial revolutions, the rise of nationalism in its varied forms, the challenges of liberalism and its diverse applications, the rapid advance and application of science, and the extent of world conflict. Each of the modern western world's "isms" is analyzed through its origin, development, and impact upon the West's political, economic, and cultural institutions. Efforts are also made to relate the reciprocal influences between Western and non-Western worlds.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives
The major objective of HIS 131 is to allow students to critically examine the civilization of which they are a part through a better understanding of modern historical developments. An inquiry approach emphasize the controversies that surround most historical events and gives the student opportunities to become involved in those controversies. Students are encouraged to appreciate the diversity of influences upon western institutions, the diffusion of western civilization's institutions and the influence of other civilizations on those institutions. The use of the problems approach emphasizes the controversy, both contemporary and modern, which surrounds most historical events, and gives each student a chance to become involved in those controversies. Through experiencing Western Civilization II course the student will:

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate the meaning of history in its Western context. Analyze the nature of modernity in the Western experience.	
2. Explain and discuss factors accounting for Europe's momentous change toward modernity in the Scientific, Agricultural, Industrial, Technological, and Political Revolutions.	
3. Recognize the positive and negative impact of nationalism upon the European states' relationships with each other and with the rest of the world.	
4. List and assess the Western responses to its various revolutions and their impact on social, political and economic institutions.	

HIS207 - Latin American Studies

Overview

Course Description
This course is an introduction to the study of Latin America and the Caribbean. Taking into consideration the region's complexity, this class examines the geography, politics, history and culture of the area as well as the nuances of its peoples and societies. Students will explore different approaches to the understanding of the area's economic development, the internal and external struggles over political power and forms of rule, and the intricacy of the region's relationship with the Unites States. Topics also include racial and ethnic identity, gender and sexuality dynamics, migration and the migrant experience, and the emergence of new cultural expressions.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Advisement Comments
Prereq: Any 100-level SOC, HIS, GEO, or PSC course

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify key features of the economic development of Latin American society and identify their underlying causes.		Think critically
Investigate the origins, scale, scope, character, and impact of social inequality in Latin American and the Caribbean and assess change and continuity of these issues.		Think critically
Describe the region's history of political conflict, particularly as it relates to caudillismo, social revolutions and the struggles for democracy.		Think critically
Explain the emergence of cultural identities in the region departing from the concept of transculturation.		Analyze human diversity
Analyze the major causes and consequences of the socioeconomic and political relationship among Latin America and the Caribbean nations and with the United States.		Think critically
Discuss the social construction of race, ethnicity, and gender roles in Latin America and the Caribbean as well as within its migrant communities living in the US.		Analyze human diversity
Illustrate the factors shaping Latin American and Caribbean migration to the US and the challenges facing its population in the US.		Think critically
Highlight and describe the contributions of Latin American and Caribbean people to the United States.		Analyze human diversity

HIS220 - 20th Century World History

Overview

Course Description
While it was once possible to understand the rhythms of life over the course of centuries, by the late 19th century this was no longer true. The 20th century wrought truly staggering changes in technology and war, family life, religion, international relations, the relationship of the government and the economy, ideas of equality and fairness. These vast, world altering changes rendered, for the first time in human history, a world that we would be entirely unrecognizable, and incomprehensible to humans who lived before. To understand our world in the 21st century, we must learn the precursor of change as the only constant.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Differentiate between the political characteristics of democratic and totalitarian regimes, as well as the associated economic systems.	
2. Explain the major international conflicts of the 20th Century, as well as their origins and ramifications.	
3. Identify and examine the origins of the Cold War and the struggle for a new world order.	
4. Discuss and distinguish the various revolutionary and nationalistic movements, concurrent with identifying the location, historical influences and characteristics of the Third World.	
5. Appraise and evaluate the impact and influences of the technological, industrial, cultural, and social changes of the 20th Century.	

HIS222 - Russia and the World

Overview

Course Description
Russia and the World is an analysis of the role of the Russian people and culture in world history. The course reviews the five great periods of Russian history - Kievan, Mongol, Muscovite, Imperial, and Soviet; but emphasis is placed on the Soviet era and the contemporary scene. Students will concentrate on Russia's role in the modern world as Czarist power, as a Soviet monolith, and as an evolving new state. Attention will also be given to the Russian impact on other states especially in terms of the Marxist-Leninist influences. A multi-disciplinary approach is taken throughout the course.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the foundations of Russian society from its origins to the 19th century-- feudalism, Christian orthodoxy, and empire building.		Think critically
Identify the basic tenets of Marxism broadly and in Russia, and the evolving historical meaning of the terms socialism and communism.		Think critically
Assess the political, economic, and social causes of Russia's revolutions in 1905 and 1917.		Think critically
Investigate the challenges faced by the newly-formed Soviet state with regards to the economy, the civil war, the nationalities question, and foreign affairs.		Think critically Analyze human diversity
Identify the origins, character, and consequences of the political conflicts that erupted within the Communist Party during the 1920s and 1930s, the rise of Stalinism, forced collectivization, rapid industrialization, and the Great Terror.		Think critically
Explain the major experiences and issues shaping the Soviet Union's foreign policy in the lead-up to World War II, the role it played in that war, and the lasting impact of the war on the country		Think critically
Examine the essential features of post-war history of the Soviet Union, including the Cold War, Thaw, Stagnation, Glasnost, and Perestroika.		Think critically
Analyze the causes and consequences of the dissolution of the Soviet Union, both in terms of the country's domestic situation and position on the world stage from the Yeltsin to the Putin eras.		Think critically
Interpret and reflect upon features of Russian and Soviet culture through literature, art, and film.		Analyze human diversity

HIS224 - World War II

Overview

Course Description

The experiences of total commitment to an intercontinental struggle, both in the domestic life of everyday Americans and the battlefront confrontations are examined. Seeks to provide a perspective to twentieth century American history by an in-depth examination of this cataclysmic period. Is presented in an interdisciplinary fashion, with emphasis on historic, political, economic, psychological, military, and social implications.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Review the world problems causing conflict in the 20th Century	
2. Explain the changing nature of warfare with the development of 'total war', including tactics, strategy and weaponry	
3. Analyze the implications of 'total war' for a nation and its citizenry on the home front	
4. Compare the outcomes of American conflicts for the US and for the world	
5. Demonstrate an understanding of the impact of this experience on the major nations involved	

HIS225 - US History Since 1945

Overview

Course Description

As the period in which the United States emerged as the global leader of the free world, the post-1945 period is the one which most Americans consider to be the natural state of the nation. Considering this period in contrast to the previous 170 years of American history, and again to the contemporary world, students will gain an understanding of the uniqueness of this time in U.S. history. Grounding the macro view of history will be investigations into specific events and people as students gain further insight into the flow and process of the U.S. as a non-static enitity.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate an understanding the complex, evolutionary nature of American society.	
2. Develop a connection between historical events, trends and individuals and the present so as a method of understanding the relevance of historical study.	
3. Analyze and evaluate primary and secondary sources so as to improve one's ability to create logical and compelling positions, while simultaneously developing an understanding of competing interpretations of historical events.	
4. Identify important factual information necessary to connect events to the present and to create compelling positions.	
5. Analyze and interpret issues in American history in light of the racial, ethnic, cultural, economic and social diversity found within the United States.	

HIS260 - Independent Study-History

Overview

Course Description

Reading, research, and/or experimentation on topic (not otherwise covered in college social sciences curriculum) selected in consultation with a faculty member. Special attention is to be given to the particular abilities and interest of students, with individual guidance for advanced studies. The student may choose: research on selected problems, supervised field studies, reading program, among other alternatives. The course maybe a group of students as well as individual study. The course may be repeated for credit. The student is responsible to adhere to the college policies and procedures for independent study.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

The nature of the course is by definition highly variable. Thus specific behavioral objectives are part of student(s) agreement with the cooperating faculty member. The generic behavioral objectives which are expected include:

1. Student(s) should demonstrate ability to state a problem and rationale for wanting to investigate the particular problem.
2. Student(s) should demonstrate initiative, ability to follow through, and thoroughness of literature research and/or reading.
3. Student(s) should demonstrate

- appropriateness of research design
- completeness of reading list
- correctness of a field study approach and method

1. Student(s) should demonstrate a collegiate presentation of results, findings, ideas, and conclusions.

HIS297 - Special Topics

Overview

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

HIS297E - Middle East Studies

Overview

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

HIT110 - Intro to Health Info Science

Overview
Course Description
An introduction to the medical or health record, this course provides a basic understanding of the development, content, format, and control of medical records. The course provides an orientation to health delivery systems as well as legal and ethical aspects of federal, state, and local agencies. The course also introduces the student to the system of healthcare reimbursement and the function of the medical record department and the medical record in reimbursement.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives
Objectives listed by unit in course outline.

HIT110L - Intro to Heal Info Lab

Overview
Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1

HIT120 - Medical Terminology

Overview

Course Description
This course reviews the systems of the human anatomy and certain medical specialties, concentrating on the medical terms and their component parts to give the student a working knowledge of medical terminology. Students will be able to build, define, pronounce, and demonstrate a working knowledge of the terms used in today's health care fields.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
Chapter 1: Basic Elements of a Medical Word

• Lesson Objectives

1.1 Review material from previous lesson.

1.2 Identify the four word elements used to build medical words.

1.3 Divide medical words into their component parts.

1.4 Apply the basic rules to define and build medical words.

1.5 Locate the pronunciation guidelines chart and interpret pronunciation marks.

1.6 Pronounce medical terms presented in this chapter.

1.7 Demonstrate your knowledge of this chapter by completing the learning activities.

Chapter 2: Suffixes

• Lesson Objectives

2.1 Review previous lesson material.

2.2 Identify examples of surgical, diagnostic, pathological, and related suffixes.

2.3 Link combining forms and word roots to suffixes.

2.4 Define and provide surgical, diagnostic, pathological, and related suffixes.

2.5 Define and provide adjective, noun, and diminutive suffixes.

2.6 Locate and apply guidelines for pluralizing terms.

2.7 Pronounce medical terms presented in this chapter.

2.8 Demonstrate your knowledge of this chapter by completing the learning activities.

Chapter 3: Prefixes

• Lesson Objectives

3.1 Review material from previous lesson.

3.2 Define common prefixes used in medical terminology.

3.3 Describe how a prefix changes the meaning of a medical word.

3.4 Recognize and define prefixes of position, number and measurement, and direction.

3.5 Pronounce medical terms presented in this chapter.

3.6 Demonstrate your knowledge of this chapter by completing the learning activities.

Chapter 4: Body Structure

• Lesson Objectives

4.1 Review material from previous lesson.

4.2 List the levels of organization of the body.

4.3 Define and identify three planes of the body.

4.4 Identify the cavities, quadrants, and regions of the body.

4.5 List and identify terms related to direction, position, and planes of the body.

4.6 Recognize, pronounce, spell, and build words related to body structure.

4.7 Describe diseases, conditions, and procedures related to body structure.

4.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 5: Integumentary System

• Lesson Objectives

5.1 Review material from previous lesson.

5.2 Locate the major organs of the integumentary system and describe their structure and function.

5.3 Describe the functional relationship between the integumentary system and other body systems.

5.4 Pronounce, spell, and build words related to the integumentary system

Chapter 6: Digestive System

• Lesson Objectives

6.1 Review material from previous lesson.

6.2 Locate the major organs of the digestive system and describe their structure and function.

6.3 Describe the functional relationship between the digestive system and other body systems.

6.4 Pronounce, spell, and build words related to the digestive system

6.5 Review material from previous lesson.

6.6 Describe diseases, conditions, and procedures related to the digestive system.

6.7 Explain pharmacology related to the treatment of digestive disorders.

6.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 7: Respiratory System

• Lesson Objectives

7.1 Review material from previous lesson.

7.2 Locate and describe the structures of the respiratory system.

7.3 Describe the functional relationship between the respiratory system and other body systems.

7.4 Pronounce, spell, and build words related to the respiratory system.

7.5 Review material from previous lesson.

7.6 Describe diseases, conditions, and procedures related to the respiratory system.

7.7 Explain pharmacology related to the treatment of respiratory disorders.

7.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 8: Cardiovascular System

• Lesson Objectives

8.1 Review material from previous lesson.

8.2 Locate and describe the structures of the cardiovascular system.

8.3 Describe the functional relationship between the cardiovascular system and other body systems.

8.4 Pronounce, spell, and build words related to the cardiovascular system

8.5 Review material from previous lesson.

8.6 Describe diseases, conditions, and procedures related to the cardiovascular system.

8.7 Explain pharmacology related to the treatment of cardiovascular disorders.

8.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 9: Blood, Lymphatic, and Immune Systems

• Lesson Objectives

9.1 Review material from previous lesson.

9.2 Identify and describe the components of blood.

9.3 Locate and identify the structures associated with the lymphatic system.

9.4 Explain the various types of immune processes.

9.5 List the cells associated with the acquired immune response and describe their function.

9.6 Describe the functional relationships among the blood, lymphatic, and immune systems and other body systems.

9.7 Pronounce, spell, and build words related to the blood, lymphatic, and immune systems.

9.8 Review material from previous lesson.

9.9 Describe diseases, conditions, and procedures related to the blood, lymphatic, and immune systems.

9.10 Explain pharmacology related to the treatment of blood, lymphatic, and immune disorders.

9.11 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities

Chapter 10: Musculoskeletal System

• Lesson Objectives

10.1 Review material from previous lesson.

10.2 Locate and describe the structures of the musculoskeletal system.

10.3 Describe the functional relationship between the musculoskeletal system and other body systems.

10.4 Pronounce, spell, and build words related to the musculoskeletal system.

10.5 Review material from previous lesson.

10.6 Describe diseases, conditions, and procedures related to the musculoskeletal system.

10.7 Explain pharmacology related to the treatment of musculoskeletal disorders.

10.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 11: Urinary System

• Lesson Objectives

11.1 Review material from previous lesson.

11.2 Locate and describe urinary structures.

11.3 Describe the functional relationship between the urinary system and other body systems.

11.4 Pronounce, spell, and build words related to the urinary system.

11.5 Review material from previous lesson.

11.6 Describe diseases, conditions, and procedures related to the urinary system.

11.7 Explain pharmacology related to the treatment of urinary disorders.

11.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 12: Female Reproductive System

• Lesson Objectives

12.1 Review material from previous lesson.

12.2 Locate and describe the structures of the female reproductive system.

12.3 Describe the functional relationship between the female reproductive system and other body systems.

12.4 Pronounce, spell, and build words related to the female reproductive system.

12.5 Review material from previous lesson.

12.6 Describe diseases, conditions, and procedures related to

the female reproductive system.

12.7 Explain pharmacology related to the treatment of female reproductive disorders.

12.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 13: Male Reproductive System

• Lesson Objectives

13.1 Review material from previous lesson.

13.2 Locate and describe the structures of the male reproductive system.

13.3 Describe the functional relationship between the male reproductive system and other body systems.

13.4 Pronounce, spell, and build words related to the male reproductive system

13.5 Review material from previous lesson.

13.6 Describe diseases, conditions, and procedures related to the male reproductive system.

13.7 Explain pharmacology related to the treatment of male reproductive disorders.

13.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 14: Endocrine System

• Lesson Objectives

14.1 Review material from previous lesson.

14.2 Locate and describe the structures of the endocrine system.

14.3 Describe the functional relationship between the endocrine system and other body systems.

14.4 Pronounce, spell, and build words related to the endocrine system.

14.5 Review material from previous lesson.

14.6 Describe diseases, conditions, and procedures related to the endocrine system.

14.7 Explain pharmacology related to the treatment of endocrine disorders.

14.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities

Chapter 15: Nervous System

• Lesson Objectives

15.1 Review material from previous lesson.

15.2 Locate and describe the structures of the nervous system.

15.3 Describe the functional relationship between the nervous system and other body systems.

15.4 Pronounce, spell, and build words related to the nervous system.

15.5 Review material from previous lesson.

15.6 Describe diseases, conditions, and procedures related to the nervous system.

15.7 Explain pharmacology related to the treatment of nervous disorders.

15.8 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities.

Chapter 16: Special Senses

• Lesson Objectives

16.1 Review material from previous lesson.

16.2 Locate and describe the structures of the eye and ear.

16.3 Pronounce, spell, and build words related to the special senses.

16.4 Describe diseases, conditions, and procedures related to the special senses.

16.5 Explain pharmacology related to the treatment of eye and ear disorders.

16.6 Demonstrate your knowledge of this chapter by completing the learning and documenting health-care activities

HIT120L - Medical Terminology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1

HIT130 - Health Info Alter Settings

Overview

Course Description
This course will introduce the student to health information in settings other than the acute care facility. Emphasis will be not only on the content of health information used in alternative settings but also on the dissemination, subsequent use, and linkage of the information. The areas covered will include: long-term care, psychiatric facilities, home health, rehabilitation, tumor registry, and other specialty settings. This course will combine classroom lecture and clinical experience with visits to these settings, guest lecturers, and clinical affiliation at a specialty site.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
4

Learning Objectives

Learning Objectives
For each type of setting that is discussed, students will demonstrate an understanding and applications of the following areas:

1. Record content as described in regulatory agencies documents and industry standards.
2. Special legal implications of laws for specific types of patients.
3. The use of ICD-9-CM coding and CPT-4 in the reimbursement process.
4. Storage and retention guidelines for each type of setting.
5. Use of computers in each setting.
6. Quantitative and qualitative review of medical record content.

7. Quality assurance.

HIT140 - Health Law

Overview

Course Description
This course will introduce the student to confidentiality of medical record information, specialized release of information procedures, health care legislation and concepts of liability in the health care field. There will be a general introduction to the American government and court systems. In addition, risk management in health care will be covered.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

CLASS 1

Introduction to medical records law, class materials and course requirements.

Lecture: Chapter 1 – Introduction to the American Legal System

Objectives:

- Distinguish between private and public law, civil and criminal law, and tort and contract actions.
- Discuss how federal constitution delineates governmental authority.
- Discuss the concept of the rights encompassed by the constitutional right to privacy.
- Explain what happens when local, state, and federal law overlap.
- Give examples of administrative agencies, describing their source of authority and how they regulate the public.
- Name the three branches of government and discuss the responsibilities of each.
- Distinguish between trial courts, appeals courts, and supreme courts.
- Explain the relationship between state and federal courts.

CLASS 2

Lecture: Chapter 2 – Medical Records and Managed Care.

Objectives:

- Identify characteristics of managed care industry that have changed the nature of patient records.
- Define utilization review and utilization review organizations.
- Explain the role of patient information in the area of utilization review.

Internet Assignment

Objectives:

- Explore the research information available on the Internet

- Explain the use of Internet information in the legal setting
- View examples of state and federal law sites
- View examples of judicial, administrative and legislative information available
- Become familiar with the Internet and its legal research options

CLASS 3

Lecture: Chapter 3 – Medical Record Requirements.

Objectives:

- Identify the governmental and private entities that establish medical records requirements.
- Lists the types of information contained in a patient record.
- Explain why it is important for a record to be complete and accurate.
- Give examples of the information state law requires in a medical record.
- Discuss the role of HCFA with regard to medical record content and retention.
- List sources of law governing medical record retention, and examples of state law requirements.
- Define statute of limitations and discuss how a statute of limitations affects record retention practices.
- Explain how medical research and storage space impact on medical record retention.
- Recommend considerations for medical record destruction policy.

CLASS 4

Lecture: Chapter 4 – Medical Record Entries. Review for Exam 1.

Objectives:

- Illustrate how legibility and accuracy are important to the quality of medical records.
- Explain how inaccurate, incomplete or illegible entries can impact patient services, claims review and reimbursement for services.
- Discuss state standards that govern the completeness, accuracy and legibility of medical records.
- Define what timeliness means with respect to medical record entries and the consequences of failing to comply with this standard.
- Distinguish between authorship and countersignatures of medical record entries.
- Explain why authentication is a key element of medical record security and what standards apply to how and when records are authenticated.
- Define auto-authentication and recommend safeguards for auto-authentication systems.
- Discuss verbal orders entries and appropriate policies.

CLASS 5

Exam 1. Library Assignment. Students utilize the LCCC library Internet facilities. Students are to answer legal research questions using the Internet resources following the guidelines set out in Class 2.

CLASS 6

Review of Internet legal research assignment.

Chapter 6 - Access to Medical Record Information.

Objectives:

- Explain the general rule regarding ownership of medical record information.
- Give examples of state laws that protect the confidentiality of medical record information.
- Describe the types of medical record information protected by federal law.
- Summarize the rights of patients and third parties to access medical record information,
- including sensitive information such as alcohol, drug abuse and psychiatric patient records.
- Give examples of laws governing the release of patient information for medical research.

- Describe the authority allowing health care providers to charge record duplication fees.
- Discuss state record duplication fee law.

CLASS 7

Lecture: Chapter 6 – Access to Medical Record Information.

Objectives: See Class 5 Objectives.

Use of LCCC Computer Lab. Explore Internet legal resources.

Objectives: See Class 2 Objectives.

CLASS 8

Lecture: Chapter 7, Reporting and Disclosure and Requirements.

Objectives:

- Give examples of mandatory reporting laws.
- Discuss the persons or facilities subject to reporting requirement under mandatory disclosure laws.
- Give examples of information that must be included in mandatory disclosure reports.

Lecture: Chapter 9, HIV/AIDS: Mandatory Reporting and Confidentiality.

Objectives:

- Outline statutory requirements for mandatory reporting of HIV/AIDS cases to state and local health departments.
- Describe restrictions contained in provisions of state HIV/AIDS statutes intended to protect the confidentiality of HIV/AIDS information.
- Discuss common exceptions specified in state HIV/AIDS statutes prohibiting disclosure of HIV test results without subject's written informed consent.
- Explain the limits on disclosure of HIV/AIDS test results of the patient and of the health care provider.
- Describe statutory provisions allowing disclosure of HIV/AIDS information pursuant to a court order, and gives examples of how courts respond to such requests.
- Describe liability provisions.
- Recommend steps to protect patient privacy and confidentiality of HIV/AIDS information.

CLASS 9

Lecture: Chapter 8, Documentation and Disclosure.

Objectives:

- Discuss state statutes, accreditation standards, and the Emergency Medical Treatment and Active
- Labor Act requirements pertaining to the content of emergency department records.
- Discuss documentation and disclosure concerns associated with celebrities, hostile patients,
- possible child abuse victims, and adoption records.
- Evaluate the documentation requirements and related obligations placed on health care providers
- by the Patient Self-Determination Act.
- Review state power of attorney and advance directive laws.
- Explain the difference between living wills and durable power of attorney for health care laws.

Submit Workbook project; Review for Exam

CLASS 10

Exam 2; Lecture: Chapter 5, Documenting Consent to Treatment.

Objectives:

- Distinguish between express and implied consent.
- Identify the information that must be disclosed for informed consent.
- Discuss what a patient must show in a consent case.
- Describe the emergency exception to the informed consent requirement.
- Define the therapeutic privilege and waiver of consent.
- Identify who can give consent.
- Discuss the effect of refusal of consent.
- Discuss the application of informed consent to minors.
- Distinguish between emancipated minor and mature minor.
- Compare responsibility for obtaining consent among physicians, providers, facilities, and organizations.
- Understand informed consent and the importance of documentation..
- Discuss the impact of religious conviction in refusal to treatment for adults and minors.
- Distinguish between the different types of consent forms and their uses.
- Discuss how and when consent may be withdrawn.

CLASS 11

Lecture: Chapter 5, Documenting Consent to Treatment. Objectives: See Class 10 Objectives.

CLASS 12

Lecture: Chapter 10, Discovery and Admissibility of Medical Records.

Objectives:

- Distinguish between discoverability and admissibility.
- Define the physician-patient privilege and discuss its effect on discovery and admissibility.
- Describe the health care provider's role in protecting health information from discovery.
- Explain waiver of the physician-patient privilege and how the privilege may be waived.
- Define hearsay.
- Define business record exception to the hearsay rule and its application to medical records.
- List other types of information that may be sought in discovery.

CLASS 13

Submit Workbook Project; Lecture: Chapter 11, Legal Theories in Improper Disclosure.

Objectives:

- Describe how state statutes affect liability for releasing medical record information.
- List the elements of a defamation claim and describe when releasing patient information might constitute defamation.
- Discuss the privileges against liability for releasing patient information.
- Describe the effect of a patient's consent to release information.
- Distinguish between a defamation claim and an invasion of privacy claim.
- Lists the types of invasion of privacy claims and give examples in the health information field.
- Discuss the potential liability for publishing patient photographs, releasing patient information to obtain reimbursement, and divulging patient information to the news media.
- Examine the elements of a breach of confidentiality claim.

Lecture: Chapter 12, Risk Management and Quality Review.

Objectives:

- Compare and contrast risk management and quality review.
- Discuss the use of medical record information in risk management and quality review areas.

CLASS 14

Lecture: Chapter 13, Computerized Medical Records.

Objectives:

- Distinguish between a fully computerized patient record system, a fully automated computer-based patient record, and computer-based records.
- Discuss the benefits of computerized patient records.
- Explain the legal concerns that arise from computerization of patient records.
- Identify the sources of law that govern confidentiality of computerized health information.
- Explain why security is important to a computerized medical record system, examples of safe-guards against unauthorized access, including technological, physical and user access controls.
- Discuss the concerns associated with outside users of computerized medical record information.
- Clarify how durability and accuracy requirements apply to computerized patient records.
- Discuss admission of computerized medical records into evidence.
- List methods of protecting the security of faxed and e-mailed medical information.
- Discuss the process of e-mail and the use of the Internet in conveying patient information.
- Discuss the confidentiality problems with relaying patient health information over the Internet.

Review for Exam.

CLASS 15

Exam 3.

HIT150 - Clinical Doc Improvement

Overview

Course Description
This course addresses the principles of Clinical Documentation Improvement and process. The emphasis in on information integrity and data quality as it relates to diagnosis and procedural documentation specificity for coding, effective query communication, revenue cycle reimbursement and compliance and regulatory requirements. Review of data benchmarking and trending will also be incorporated.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HIT110 Intro to Health Info Science

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Student will be able to display quantitative reasoning skills to clinical source documentation	#1
2. Identify when and how to communicate with providers through effective queries	#2
3. Explain the MS-DRG, case-mix and reimbursement principles related to the clinical documentation improvement process	#3, #4
4. Identify and explain the data collection tools, analysis and reporting techniques for the clinical documentation improvement process	#3, #4
5. Demonstrate an understanding with all laws and regulations related to coding, documentation and reimbursement	#6, #9

HIT150L - Clinical Doc Improvement Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1

HIT200 - Health Information Processing

Overview

Course Description
This course will introduce the HIT student to the concepts of data entry, data display, report generation data abstracting and the use of data in health care facilitis and the role of the HIM manager in this process.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HIT110 Intro to Health Info Science, HIT130 Health Info Alter Settings

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Identify the role of the HIM professional as it relates to data quality	N/A
2. Apply policies and procedures to ensure the accuracy and integrity of health data	N/A
3. Apply and evaluate an information system database structure, collect and maintain health data	Use current technology effectively
4. Evaluate the quality of statistical reports: prepare statistical reports using data and software systems	Apply Quantitative reasoning
5. Conduct quality assessment or clinical pertinence review studies of patient record documentation. Validate the reliability of data sources and data.	
6. Identify and use secondary data	

HIT200L - Health Info Processing Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1

HIT210 - Health Information Reporting

Overview

Course Description
This course will introduce the student to general health care statistics and vital statistics as well as the state and federal laws governing the collecting of those statistics. Students will be exposed to health statistics reporting, display of information and presentation of results. In addition, there will be an introduction to Quality Assurance and Utilization Review in the Acute Care Facility as two of the utilizers and generators of health data in the acute care facility. A laboratory session will be held each meeting to apply concepts as they are reviewed.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
Objectives I of Unit I

At the completion of this unit, the student should be able to:

-Identify the types of health statistics.

-Identify the uses for the collection and retrieval of data.

-Identify the origins of statistical data.

-Discuss the role of the Medical Record Practitioner in the collection and retrieval of statistical data.

-Define the need for data uniformity and controls.

-Discuss the need for confidentiality of data during the collection, retrieval and presentation process.

Objectives II of Unit I

At the completion of this unit, the student should be able to:

-Define Mathematical Statistics

-Collect Data and prepare tables and graphs for presentation of statistical data.

-Perform statistical computations based on figures provided.

Objectives III of Unit I

At the completion of this unit, the student should be able to:

-Define Mathematical Statistics.

-Collect Data and prepare tables and graphs for presentation of statistical data.

-Perform statistical computations based on figures provided.

Objectives IV of Unit I

At the completion of this unit the student should be able to:

-Recognize widely used hospital statistical formulas.

-State the definitions of hospital statistical formulas.

-Apply the formulae to the development of statistical reports through the performance of statistical computations based on figures provided for stimulation of hospital activity.

-Analyze the use and functions for the collection and retrieval of health statistics.

Objectives V of Unit I

At the completion of this unit the student should be able to:

-Recognize widely used hospital statistical formulas.

-State the definitions of hospital statistical formulas.

-Apply the formulae to the development of statistical reports through the performance of statistical computations based on figures provided for simulation of hospital activity.

-Analyze the use and functions for the collection and retrieval of health statistics.

Objectives I of Unit 2

At the completion of this unit the student should be able to:

-State the purpose and philosophy of Quality Assurance, Quality Improvement, and Total Quality Management.

-Discuss the role of accrediting agencies in assuring quality of care.

-Understand various organizational structures for developing a hospital-wide QA program.

-Define terms associated with Quality Assurance activities, Quality Improvement and Total Quality Management.

Objectives II of Unit 2

At the completion of this session, the student should be able to:

-Describe the basic components of a quality assurance program.

-Identify Medical Staff and hospital committees that are typically involved in a hospital quality assurance program, with an understanding of functions and activities.

-Discuss the impact of QA on Medical Record Services.

-Identify methods of data collection.

-Describe the role of the Quality Assurance Coordinator in:

- -topic selection
- -establishing study parameters
- -developing criteria
- -data collection display
- -evaluation of data
- -follow-up reports
- -information flow

-Know how to design a study to meet specific objectives.

-Perform data retrieval using generic screening criteria and indicators.

-Perform statistical analysis for quality monitoring and assessment.

-Understand the relationship between quality assurance activity and medical staff credentialling.

-Discuss the concept of automating the Quality Assurance Functions.

-Discuss the role of the Medical Record Practitioner in the Quality Assurance Process.

Objectives I of Unit 3

At the end of the session the student will be able to:

-Define the concept of peer review.

-Understand the development of Utilization Review and the purpose.

-Understand the role and objectives of the PRO in the Utilization Review Process.

-Understand delegated and non-delegated review.

-Describe the procedure for performing Utilization Review in an acute care setting.

-Explain the role of the Utilization Review Coordinator and Physician Advisor.

-Understand the definitions associated with the Utilization Review Functions.

-Review medical records and make decisions regarding medical necessity and intensity of service.

-Describe the organization of a Hospital Utilization Review Process.

-Define the advantages and disadvantages of concurrent review.

-Discuss the role of the Medical Record Practitioner in the Utilization Review Process.

-Define discharge planning and the role of a hospital discharge planner.

-Discuss the relationship between Utilization Review, Quality Assurance, Medical Records, and Finance.

HIT220 - Health Info Mgmt Practicum

Overview

Course Description
This course will cover the role of the medical record technician as a manager and supervisor in the medical record department and other health care settings. Students will rotate through "simulated" medical record departments in all functional areas and be responsible for developing job descriptions, policies and procedures, hiring and termination policies, and other management-related experiences. In addition, the student will be exposed to forms design and control, quality control and auditing practices. Field trips to observe management styles will be arranged.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1

Requirements

Prerequisites
HIT110 Intro to Health Info Science

Learning Objectives

Learning Objectives
The purpose of this course is to expose students to the supervisory aspects of health care organizations, especially in the medical record profession. Human aspects of supervision and behavioral factors that motivate employees will be taught. Basic concepts with emphasis on the five basic managerial functions will be studied--planning, organizing, staffing, directing, or influencing and controlling. This course will link up the theory of medical record management with practical applications through role playing and simulated laboratory situations.

HIT220L - Health Info Mgmt Practicum Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1

HIT230 - Professional Practice Exp

Overview
Course Description
This course is completed via AHIMA's Virtual Lab as directed by the HIT Program Faculty to simulate an acute care hospitals HIM dept. The student will participate in the various functions found in such a dept. and will have hands on experience with these functions. They should include: data abstracting, data processing and entry, medical record assembly and review, use of computerized software systems seen in healthcare settings, coding of medical diagnoses and procedures. Various assignments and projects will be assigned by the instructor to give the student hands on experience with various hospital and healthcare based systems.

Total Credits
Total Credit Hours:
4

Billing Hours
Billing Hours Min:
4

Lecture Hours
Lecture Hours (per week):
2.5

Other Hours
Other Total Hours:
1.5

Requirements
Prerequisites
HIT110 Intro to Health Info Science, HIT120 Medical Terminology, HIT140 Health Law, HIT210 Health Information Reporting, HIT255 CPT and Other Class Systems

Learning Objectives
Learning Objectives
To apply the principles and techniques learned in previous HIT courses that simulate a practical setting such as an Acute Care Hospital or other type of Healthcare facility.

HIT230L - Professional Practice Exp Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
6

HIT240 - Adv Medical Term & Pathophysio

Overview

Course Description
This course builds upon the knowledge base learned in Medical Terminology and expands the students understanding of medical terms, disease processes and pathophysiology, clinical diagnostic studies, pharmacology and other terms used in healthcare settings. This course is designed for the Healthcare coding student as well as workers in various positions in healthcare settings who wish to further expand their understanding of medical terminology and clinical knowledge base. It will delve into much greater depth in the areas of disease etiology, current treatment modalities and the classification, application and use of medications than the prerequisite course Medical Terminology.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO163 Anatomy & Physiology I, BIO164 Anatomy & Physiology II

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Student will be able to apply the concepts of pathophysiology processes within each body system and its relationship to the disease process as it pertains to health information management roles	# 1, 9
2. Student will be able to identify medications used to diagnosis and treat diseases for diagnosis coding	# 1, 6
3. Student will be able to identify medical terminology found in clinical source documents, medical records and other healthcare documentation pertaining to the identification of diseases, signs and symptoms for diagnosis coding.	# 1, 3, 6, 9
4. Student will be able to apply above concepts in their role as coders in a variety of healthcare settings and demonstrate an understanding of the link between clinical data and accurate and ethical coding procedures.	# 1, 3, 9

HIT250 - ICD-10 CM Coding/Class Syst

Overview

Course Description
This course reviews the ICD-10-CM coding and classification systems used in the health care setting. Students will learn basic skills and apply their knowledge by coding actual medical records, as well as coding the workbook problems. Students will also be exposed to a computer system used in many hospitals that code and abstract patient data.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
BIO163 Anatomy & Physiology I, HIT110 Intro to Health Info Science, HIT120 Medical Terminology

Learning Objectives

Learning Objectives
General Objectives

Students will:

1. Understand the purpose of classification systems.
2. Learn the ICD-10 system.
3. Demonstrate knowledge of the DRG system.
4. Learn the fundamentals of manual abstracting systems and computerized abstracting systems.
5. Learn how to code from the medical record.

Student Objectives

1. List and explain the three purposes of disease and operation classification.
2. Define nomenclature and classification and differentiate between the two.
3. Name the major divisions of ICD-10.
4. Define the arrangement of each of these major divisions.

5. Define the abbreviations, punctuations, and other conventions used in ICD-10.

6. Define category, subcategory and subclassification codes as used in ICD-10.

7. Apply the coding principles of ICD-10 to any given diagnosis or procedure.

8. Code and retrieve diagnoses and procedures proficiently (according to ICD-10).

9. Demonstrate an understanding of the workings of the DRG system and its relationship to ICD-10 coding.

HIT255 - CPT and Other Class Systems

Overview

Course Description
This course is designed to train HIT students in the art of CPT coding as well as familiarize them with other nomenclature and classification systems. Computerized Tumor Registry is also reviewed and applied.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Corequisites
HIT110 Intro to Health Info Science, HIT120 Medical Terminology, BIO163 Anatomy & Physiology I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Student will demonstrate a knowledge of the various conventions used in the CPT code book such as starred procedures, triangle, etc. and apply them in actual case problems and exercises.	1, 3
2. Student will demonstrate a knowledge of the coding guidelines for the six different sections in the CPT code book and apply them in actual case problems and exercises.	1, 3
3. Students will be able to code accurately using the CPT coding system in all sections of the CPT coding book.	N/A

HIT255L - CPT and Other Class Systems Lb

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1

HIT260 - Advanced Coding Concepts

Overview
Course Description
This course is designed to build upon the HIT student's basic knowledge of coding of diagnoses and procedures by exploring the varied concepts for coding of complicated body systems, intricate reimbursement and systems and advanced coding concepts seen in the Healthcare Industry today.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
HIT250 ICD-10 CM Coding/Class Syst, HIT255 CPT and Other Class Systems

HIT260L - Advanced Coding Concepts Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1

HIT275 - Clinical Affiliation III

Overview

Course Description
This is the Health Information Technology student's final clinical placement. Each student will spend 8 hours per week during each week of the semester at a clinical site. Two weeks will be spent at an area long-term care facility. Two weeks will be spent at a tumor registry. Each student will spend the remaining 10 weeks at an "alternative setting." These settings include placement in HMOs, psychiatric/rehab centers, insurance companies, or any other facility that utilizes health information and the skills of a medical record technician. The student's clinical project will be decided upon jointly by the clinical director and the HIT program director during the first week at the "alternative setting" clinical placement.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
1

Lab Hours

Lab Hours (per week):
8

HPE101 - Personal & Community Health

Overview

Course Description
Presentation of and investigation into healthful practices. Students will study body functions and evaluate lifestyles as they influence their emotional and physical development.

Total Credits

Total Credit Hours:
2

Billing Hours ⓘ

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Learning Objectives

Learning Objectives
1. Demonstrate awareness and utilization of beneficial health practices.
2. Analyze lifestyle and basic bodily structure and function as it relates to:

- mental and emotional health
- health hazards
- human sexuality and the role of family
- personal and preventive health care

HRT110 - Woody Plants I

Overview

Course Description
A survey of woody plants emphasizing identification, aesthetic value, and culture of as many as 140 species including trees, shrubs, and vines. Elements of landscape design and ecological considerations will also be studied. Lab requires weekly walks around and near campus to study woody specimens, or may occasionally require class meetings at off-campus sites.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

HRT111 - Woody Plants II

Overview

Course Description
A continuation of Woody Plants I (HRT 110) emphasizing identification, aesthetic value, and culture of as many as 140 woody species including trees, shrubs, and vines. Elements of landscape design and ecological considerations will also be studied. Lab requires weekly walks around and near campus to study woody specimens, or may occasionally require class meetings at off-campus sites.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

HRT120 - Plant Propagation

Overview

Course Description
Lectures and labs involve study, experimentation, and practical experience with vegetative plant propagation methods including root, stem, and leaf cuttings, grafting, and bulb propagation, and with sexual reproduction in plants, seeds, and germination. Lectures and labs involve study, experimentation, and practical experience with vegetative plant propagation methods including root, stem, and leaf cuttings, grafting, and bulb propagation, and with sexual reproduction in plants, seeds, and germination.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

HRT201 - Soil Science

Overview

Course Description
Discussion and examination of the physical, chemical, and biological characteristics of soil including soil formation, fertility, pH, texture, and water-holding capacity. Soil profiles, erosion, organic matter, soil organisms, and plant nutrition will also be studied.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

HRT210 - Herbaceous Plants I

Overview

Course Description
Course will emphasize identification and culture of garden perennials, annual bedding plants, and indoor flowering and foliage plants. Students will acquire hands-on experience raising annual and perennial garden plants. Labs will require some outdoor work and study of plants in a garden setting. May occasionally require class meetings at off- campus sites.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

HRT211 - Herbaceous Plants II

Overview

Course Description
A continuation of Herbaceous Plants I (HRT 210) emphasizing identification and culture of garden perennials, annual bedding plants, and indoor flowering and foliage plants. Students will acquire hands-on experience raising annual and perennial garden plants. Labs will require some outdoor work and study of plants in a garden setting. May occasionally require class meetings at off-campus sites.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

HRT230 - Applied Entomology

Overview

Course Description
A general study of insect diversity, classification, anatomy and physiology, and ecology. Special emphasis on plant-insect interactions, agriculturally important insects, pest control methods, and integrated pest management. Class will require some outdoor study (both during class and independently), including preparation of an insect collection. May occasionally require class meetings at off-campus sites.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

HUS110 - Intro to Human Services

Overview

Course Description
This course provides an introductory knowledge of the human services profession. Students will be introduced to the concepts and frameworks that define the human service profession. The historical development and legislative influences of the profession will be explored. The nature of the helping process will be addressed. An overview of the human service delivery systems and organizations will be reviewed. Professional values, skills, and ethics will be presented. The range and types of populations served by human services will be discussed. Additionally, human service professional roles, ethics, and resources will be introduced.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Analyze a problem of living using the principles and framework of human services		
Discuss interdisciplinary components and parameters of human services and roles of human service professionals		
Discuss the historical development of and legislative influences on the human service movement		
Discuss the current growth, populations served, and trends of the human service movement		
Discuss the human service delivery systems and organizations		
Discuss the nature of the helping process		
Discuss the profession's ethical standards and how they apply to human service workers		

HUS115 - Intro to Drug/Alchol Sub Abuse

Overview

Course Description

The course provides introductory knowledge of the structural model of Drug and Alcohol education. Student will be introduced to the historical, biological, cultural, medical, and psychological perspectives of drup and alcohol use, abuse and dependence. The various drug classifications will be discussed along with the physiological, psychological and physical effects of each substance. Etiology, diagnosis, interventions, treatment (s) and prevention of drug and alcohol use/abuse/dependence will be explored. The disease model of addiction as it pertains to children, adolescents and adults of various cultures and diversityes will be discussed.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Demonstrate an understanding of the genetic, cultural, social, legal, and biological factors influencing the process of chemical dependency and recovery from it.

2. Describe the pharmacological and physiological factors and contribute to the addictive process.

3. Discuss the various categories and classifications of drugs of abuse along with their physiological, psychological, spiritual, medical and societal consequential impacts.

4. Describe the process, purpose and functions regarding a detailed drug and alcohol assessment, an accurate DSM-IV diagnosis as well as referral to the appropriate level of treatment.

HUS120 - Interviewing & Case Mgmt

Overview

Course Description

A practical course focusing on the knowledge and skills of the helping process. Students will develop the helping skills needed for entry level workers in human services settings. Emphasis will be on the practical application of interviewing, basic counseling communication, and case management skills. The components of interpersonal communications and interviewing techniques are studied with a focus on giving and receiving information in the interview setting. Helping skills for diverse popluations will be presented. Professional ethics within the helping process will be explored.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

LCCC COURSE OBJECTIVES	SOCIAL WORK COMPETENCIES	CSHSE COMPETENCIES
Demonstrate the appropriate use of attentive communication skills and basic counseling responses and leads (e.g. reflections, restatement, paraphrase, explanation, interpretation, open and closed question)	Demonstrate self-awareness of who one is and why one is choosing to pursue the profession of social work Demonstrate professional behavior in demeanor, behavior, appearance, communication, and role Identify how to manage personal values in a way that allows professional values to guide practice Describe and begin to apply generalist practice assessment models Demonstrate an understanding of the importance of difference in shaping life experiences Integrate the ethical standards outlined by the National Association of Social Workers	Demonstrate how to a. Obtain information through interviewing, active listening, consultation with others, library or other research, and the observation of clients and systems. b. Record, organize, and assess the relevance, adequacy, accuracy, and validity of information provided by others. c. Compile, synthesize, and categorize information. d. Disseminate routine and critical information in written and oral form and in a timely manner to clients, colleagues, or other members of the related services system e. Maintain client confidentiality and appropriate using client data. f. Use technology for word processing, sending email, and locating and evaluating information. Demonstrate the: a. Knowledge and skills to analyze and assess the needs of clients or client groups. b. Skills to develop goals, and design and implement a plan of action. c. Skills to evaluate the outcomes of the plan and the impact on the client or client group. Demonstrate how to a. Clarify expectations. b. Deal effectively with conflict. c. Establish rapport with clients. d. Develop and sustain behaviors that are congruent with the values and ethics of the profession. Demonstrate the a. Conscious use of self. b. Clarification of personal and professional values. c. Awareness of diversity. d. Strategies for self-care. e. Reflection on professional self
Discuss the stages of the helping process: rapport, problem identification, information gathering, assessment, goal planning, implementation, evaluation, and termination		
Demonstrate appropriate verbal and nonverbal behaviors during the interview process.		
Demonstrate the use oneself (empathy, respect, congruence, genuineness) during the interview process		
Demonstrate ability to compile, collate, and disseminate gathered information to clients, colleagues, and members of the human service system		
Demonstrate ability to assess and evaluate the adequacy, accuracy, and validity of information provided during the interview process		
Formulate progress notes/ case notes upon delivery of direct services		
Demonstrate an understanding of the development of a case plan		
Demonstrate the ability to use technology for communication and written documentation (email, word processing)		
Integrate professional ethics issues(e.g. confidentiality, liability, empowerment, self-determination) during the helping process		

LCCC COURSE OBJECTIVES	SOCIAL WORK COMPETENCIES	CSHSE COMPETENCIES
		Integrate the ethical standards outlined by the National Organization for Human Services (NOHS) and the Council for Standards in Human Service Education

HUS125 - Intro to Therapeutic Rec

Overview

Course Description

This course will introduce students to the purposes and processes of therapeutic recreation for individuals served by social service providers. Students will explore models of interventions and diveristy of populations served. Students will study the development of planning phases: needs assessment, development, scheduling and timing, implementation, adaptation, and evaluation of activities. Current trends and therapeutic recreation research will be explored.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

Discuss the purpose and process of therapeutic recreation as a component of a holistic approach to serving clients.

Discuss the process of program development: needs assessment, development, timing and scheduling, environment, implementation, adaptations, and evaluation.

Describe population demographics that influence activity development, e.g. age characteristics, skilled or unskilled, physical abilities, cognitive abilities, ethnic and cultural background, etc.

Plan, implement, and evaluate therapeutic recreation activities.

HUS150 - Intellectual &Dev Disabilities

Overview

Course Description

The course will focus on the historical, cultural, medical, and psychological perspectives when helping individuals with developmental disabilities in community settings. Topics on etiology, life stages, interventions, and treatments will be explored. Adult transition issues, self-determination and empowerment, and community life will be discussed. Political and legislative influences and ethical issues will be presented.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

- Describe the interdisciplinary systems affecting community integration of individuals with developmental and intellectual disabilities
- Describe the theoretical perspectives of developmental and intellectual disabilities
- Describe the characteristics, etiology, and interventions for individuals with developmental and intellectual disabilities
- Describe behavioral and cognitive intervention strategies for individuals with developmental and intellectual disabilities
- Describe legislative and political influences on individuals with developmental and intellectual disabilities.

HUS160 - Counseling Skills & Theories

Overview

Course Description

Students will further develop basic communication and intervention interviewing skills using a multitheoretical 3-stage counseling model. Communication and interpersonal interaction skills are emphasized. Observation, listening, and problem-solving skills will be addressed. Students will learn how to use appropriate communication and interventions with diverse populations. Students will apply basic counseling communication skills within a technology environment. An overview of counseling theories will be presented. Professional ethics will be reviewed. Requirements: Students will provide 40 hours of basic counseling communication experience, Internet access required.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

HUS110 Intro to Human Services, HUS120 Interviewing & Case Mgmt, ENG105 Research and Composition, PSY140 Introduction to Psychology

Advisement Comments

Minimum grade of "C" in prerequisites

Learning Objectives

Learning Objectives

LCCC COURSE OBJECTIVE	CSHSE STANDARD
Demonstrate the use of self within the interviewing process: empathy, positive regard, genuineness, and concreteness	· Clarifying expectations · Dealing effectively with conflict · Establishing rapport with clients · Developing and sustaining behaviors that are congruent with the values and ethics of the profession · Conscious use of self · Clarification of personal and professional values · Reflection of professional self
Demonstrate basic counseling communication techniques within a 3 stage model including but not limited to structuring, leading, questioning, and paraphrasing to define, assess, and plan for the client's needs.	· Obtaining information through interviewing, active listening, consultation with others, library or other research, and observation of clients and systems · Knowledge and skills to analyze and assess the needs for clients or client groups · Knowledge and skill development in intake interviewing · Knowledge and skill development in individual counseling
Demonstrate effective intervention strategies for clients from diverse backgrounds and situations including but not limited to human diversity, children and parents, older adults, individuals with disabilities, and crisis intervention.	· Emphasis on context and role of diversity (including, but not limited to ethnicity, culture, gender, sexual orientation, learning styles, ability, and socio-economic status) in determining and meeting human needs · The range of populations served and needs addressed by human services
Demonstrate basic counseling responses using a multi-theoretical 3 stage-model within personal and online environments.	· Disseminating routine and critical information to clients, colleagues, or other members of the related services system that is: using technology for word processing, sending email, and locating and evaluating information.
Display an understanding of the major theories of counseling.	· The major models used to integrate prevention, maintenance, intervention, rehabilitation, and healthy functioning
Demonstrate the integration of professional ethics within the therapeutic interview process	· Disseminating routine and critical information to clients, colleagues, or other members of the related services system that is: maintaining client confidentiality and appropriate using client data · Client determination · Confidentiality of information · Integration of the ethical standards outlined by the National Organization for Human Services (NOHS) and the Council for Standards in Human Services Education (available on the NOHS website)

HUS170 - Systems and Processes

Overview

Course Description

Provides an overview of the human service organization and delivery systems for analysis and evaluation. A historical and legislative review of the development of human service delivery systems is provided. Emphasis is placed on the analysis of the complex structure of existing systems and service delivery models. Ethical and legal issues will be discussed.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HUS110 Intro to Human Services, HUS120 Interviewing & Case Mgmt, ENG105 Research and Composition

Corequisites
SOC150 Introduction to Sociology

Advisement Comments
HUS 120 prereq with a C or higher

Learning Objectives

Learning Objectives

Discuss the historical factors and legislation affecting delivery systems	How public and private attitudes influence legislation and the interpretation of policies related to human services
Discuss societal attitudes, political and legal effecting the development, planning, and implementation of human service delivery systems.	How public and private attitudes influence legislation and the interpretation of policies related to human services
Analyze the organizational structure of an organizational system	· An introduction to the organizational structures of communities · The range and characteristics of human services delivery systems and organizations
Discuss the federal and PA state social welfare policies affecting the delivery of services (social security, PRWORA, TANF, Medicare, Medicaid, child abuse regulations, elder abuse/neglect regulations	· The major models used to integrate prevention, maintenance, intervention, rehabilitation, and healthy functioning
Discuss the ethical dilemmas (e.g. confidentiality, client rights, technology confidentiality) affecting the structure of systems and delivery models.	· Developing and sustaining behaviors that are congruent with the values and ethics of the profession · The least intrusive intervention in the least restrictive environment · Client determination · Confidentiality of information · The worth and uniqueness of the individual including culture, ethnicity, race, class, gender, religion, ability, sexual orientation, and other expressions of diversity · Belief that individuals, services systems, and society can change · Integration of the ethical standards outlined by the National Organization for Human Services (NOHS) and the Council for Standards in Human Services Education (available on the NOHS website)

HUS180 - Human Behavior & Social Enviro

Overview

Course Description
This course is intended for students studying to become generalist looking to enter the professional field of human services and social work. Students will explore how to work with the demands of the helping profession and understanding of human behavior across developmental stages while maintaining a healthy reciprocal relationship with clients. Knowledge from prior foundation courses (sociology, anthropology, psychology and biology) will be integrated to provide a bio-psycho-socio-spiritual framework for students to view human growth and development through the lifespan.The "person in environment" focus is approached from an ecological perspective of the individual in the context of family, groups and the community. The social systems model will help students focus on the dynamic interplay and reciprocal nature of the person and the environment. Students will examine ways to incorporate these theories and ethical standards to support a professional relationship and implement practical intervention skills for clients.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HUS110 Intro to Human Services, HUS120 Interviewing & Case Mgmt, SOC150 Introduction to Sociology, ENG105 Research and Composition

Advisement Comments
SOC 150 prereq with a C or higher

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Apply ethical standards to social work practice with individuals and further identify as a professional social worker and demonstrate professional behavior. (EPAS Competency 1)	# 7	#9-Evaluate ethical aspects of decision making
Apply knowledge from prior liberal arts courses and foundation courses (i.e., sociology, psychology, anthropology and biology) to the bio-psycho-social-spiritual factors that affect human behavior and environment. (EPAS Competency 2)	# 1	#1-Think critically
Develop sensitivity to human diversity (i.e., race, ethnicity, class, gender, disablement and sexual orientations) and incorporate this with an understanding of the impact of racism, sexism, ageism, classism, that shape individual functioning, group processes and social institutions and negotiate, mediate and advocate with and on behalf of diverse clients and constituencies. (EPAS Competency 3)	#1	#7-Analyze human diversity
Apply information and theories related to human behavior and the social environment to life situations in a manner consistent with social work values and the promotion of social and economic justice.	#1	#1-Think critically
Demonstrate the distinguishable stages of human development over the lifespan, the range of social systems in which people live and the ways social systems promote or deter people in maintaining or achieving health and well-being.	#1	#1-Think critically
Explain and apply basic principles of learning theories and the systems/ecological and psychosocial frameworks and analyze individual, family, group, organizational, community, and societal dynamics from each of these perspectives.		
Connect the knowledge of social issues and problems with theories in human behavior to develop appropriate social work assessments, interventions and to apply evaluation findings to improve practice effectiveness at the micro, mezzo and macro levels. (EPAS Competency 8)	#1	#1-Think critically
Identify the importance of scientific research in providing theoretical perspectives regarding human development; evaluate studies concerning social and environmental context of human behavior to understand individual development and behavior across the lifespan and the interactions among individuals and between individuals, families, groups, organizations and communities. (EPAS Competency 6)	#5	#2-Communicate effectively
Apply knowledge to understand the person-in-environment perspective and other multidisciplinary theoretical frameworks guided by assessment, intervention and evaluation. (EPAS Competency 7)	#2	#1-Think critically
Describe biological, social, cultural, psychological, and spiritual aspects of adolescent, early adult, middle adult, and older adult developmental states within the context of the broader environment.	#5	#1-Think critically

HUS210 - Group Processes

Overview

Course Description
A practical skills course which focuses on the concepts of group process and the skills in designing and conducting therapeutic groups. An overview of group theory and the application of the theoretical framework in conducting groups will be presented. Students will develop, conduct, and evaluate outcomes of group sessions for a variety of group setttings. Group leadership skills and diversity competencies will be developed. Leadership interventions and ethical issues in group settings will be explored.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HUS160 Counseling Skills & Theories

Advisement Comments
HUS 160 prereq with C or higher

Learning Objectives

Learning Objectives

LCCC OBJECTIVE	CSHSE STANDARD
Discuss the theoretical and conceptual framework for conducting group therapy.	Small groups: Theories of group dynamics
Assess the need for, develop, conduct, and evaluate a group session.	Small groups: Overview of how small groups are used in human services settings
Demonstrate leadership responses and interventions that are diversity-competent.	· Emphasis on context and role of diversity (including, but not limited to ethnicity, culture, gender, sexual orientation, learning styles, ability, and socio-economic status) in determining and meeting human needs · Small groups: Group facilitation skills
Demonstrate the integration of professional ethics (e.g. confidentiality, self-disclosure, leadership competency) during the group process.	Integration of the ethical standards outlined by the National Organization for Human Services (NOHS) and the Council for Standards in Human Services Education (available on the NOHS website)

HUS215 - Professional Seminar

Overview

Course Description
This course serves as a prerequisite class to the internships required in the Human Services AAS program. Students will examine the developmental stages of professional development in an internship, prepare for the use of supervision, develop learning goals for the experience, and discuss the code of ethics and ethical dilemmas involved within the internship experience. Students will develop a professional portfolio, research agencies and interview professionals for potential placement site agencies, and prepare for the contractual obligations required of the community agencies.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
ENG105 Research and Composition, HUS110 Intro to Human Services, HUS120 Interviewing & Case Mgmt, PSY140 Introduction to Psychology, SOC150 Introduction to Sociology

Advisement Comments
Prereqs all with a C or better

Appropriate clearances required for agency placement.

Learning Objectives

Learning Objectives

LCCC OBJECTIVE	CSHSE STANDARD
Discuss the attitudes, skills, and knowledge required for effective professional practice	· Reflection on professional self (e.g. journaling, development of a portfolio, or project demonstrating competency) · Strategies of self- care
Evaluate ethical situations by using an ethical decision making model and applying the National Organization of Human Services code of ethics	Integration of the ethical standards outlined by the National Organization for Human Services (NOHS) and the Council for Standards in Human Services Education (available on the NOHS website)
Research vulnerable populations and local social services agencies for internship placement.	Demonstrate readiness for internship placement through the construction of a professional portfolio, development of a resume, development of effective interviewing skills, and obtainment of required background records
Demonstrate readiness for internship placement through the construction of a professional portfolio, development of a resume, development of effective interviewing skills, and obtainment of required background records.	· Reflection on professional self (e.g. journaling, development of a portfolio, or project demonstrating competency) · Strategies of self- care
Construct professional learning goals within the domains of knowledge, skills, personal, professional, and civic for the selected internship placement sites.	· Reflection on professional self (e.g. journaling, development of a portfolio, or project demonstrating competency) · Strategies of self- care

HUS220 - Internship I

Overview

Course Description
Students will be given experiences at a human service agency to apply the knowledge, values, concepts, and skills of the human service profession. The student will complete 180 hours with a minimum of 12 hours per week under the direct supervision of the agency's personnel. Under direct supervision, students will observe and participate in the basic procedures and routines with the client and the agency system. Emphasis will focus on the student's professional growth in self-awareness, direct service, interpersonal communciation, interviewing skills, and the introduction to the human service delivery system.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
1

Other Hours

Other Total Hours:
13

Learning Objectives

Learning Objectives

LCCC OBJECTIVE	CSHSE STANDARD
Describe the mission and role of the agency, including the types and characteristics of the clients in the community	Introduction to the organizational structures of communities
Demonstrate an awareness of self in the process of becoming a professional human service worker	Developing and sustaining behaviors that are congruent with the values and ethics of the profession.
Demonstrate effective communication skills and appropriate personal interactions with clients and agency staff	Interdisciplinary team approaches to problem solving Clarification of personal and professional values
Demonstrate the ability to receive constructive feedback from agency personnel and course instructor	Clarification of personal and professional values Obtaining information through interviewing, active listening, consultation with others, library or other research, and observation of clients and systems
Identify and assess current issues, problems, and challenges of the agency	An understanding of the capacities, limitations, and resiliency of human systems

HUS230 - Internship II

Overview

Course Description
Students will be given experiences at a human service agency to apply the knowledge, values, concepts, and skills of the human service profession. The student will complete 180 hours with a minimum of 12 hours per week under the supervision of the agency's personnel. With minimal supervision, students will observe and participate in the basic procedures and routines with the client and the agency system. Emphasis will focus on the student's professional growth in self-awareness, interpersonal communication, interviewing skills, case management, advocacy, crisis management, and community outreach.

Total Credits

Total Credit Hours:
3.5

Billing Hours ⍰

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
1

Other Hours

Other Total Hours:
13

Requirements

Prerequisites
HUS210 Group Processes, HUS220 Internship I

Advisement Comments
Minimum of C grade in prereqs

Clearances required for agency placement

Learning Objectives

Learning Objectives

LCCC OBJECTIVE	CSHSE STANDARD
Describe the mission and role of the agency, including the types and characteristics of the clients in the community	Introduction to the organizational structures of communities
Demonstrate an awareness of self in the process of becoming a professional human service worker	Developing and sustaining behaviors that are congruent with the values and ethics of the profession.
Demonstrate effective communication skills and appropriate personal interactions with clients and agency staff	Interdisciplinary team approaches to problem solving Clarification of personal and professional values
Demonstrate the ability to receive constructive feedback from agency personnel and course instructor	Clarification of personal and professional values Obtaining information through interviewing, active listening, consultation with others, library or other research, and observation of clients and systems
Identify and assess current issues, problems, and challenges of the agency	An understanding of the capacities, limitations, and resiliency of human systems

HUS240 - Mgmt Human Services Agencies

Overview

Course Description
Provides an overview of the human service agency from the management perspective. Organizational theories are discussed. Purposes and functions of management are explored. Components of management, including but not limited to service environment, marketing, program planning, designing, managing, financing, and evaluating are discussed. Attention is focused on current and future trends within delivery systems and their impact on management and administrative policy. Legal and ethical issues are addressed within the context of resource management.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
HUS210 Group Processes, HUS220 Internship I

Advisement Comments
Grade of C or better in prereqs.

Learning Objectives

Learning Objectives

LCCC OBJECTIVES	CSHSE
Discuss the functions of human service management: leadership, planning, design, staffing, budgeting, supervising, monitoring and evaluating.	· The range and characteristics of human services delivery systems and organizations · The range of populations served and the needs addressed by human services
Discuss the organizational theories of management in relationship to human service agencies.	The range and characteristics of human services delivery systems and organizations
Analyze the current trends in human service management politically, economically, sociologically, and technologically	· The range and characteristics of human services delivery systems and organizations · Obtaining information through interviewing, active listening consultation with others, library or other research, and observation of clients and systems
Describe legal and ethical considerations when confronted with dilemmas in human service management.	Integration of the ethical standards outlined by the National Organization of Human Services (NOHS) and the Council for Standards in Human Services Education (available on the NOHS website)
Identify different funding sources and their implications for human service agencies.	Obtaining information through interviewing, active listening consultation with others, library or other research, and observation of clients and systems.

HUS297 - Special Topics

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
0

IDS005 - Excellence in Instruction

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours
Lecture Hours (per week):
0

Lab Hours
Lab Hours (per week):
0

Other Hours
Other Total Hours:
0

IDS105 - Think, Prob Solv, Team Buildin

Overview
Course Description
This course is based upon the premise that the thinking process is a skill that can be examined, improved and is independent of intelligence. Practical thinking tools are presented and practiced using everyday situations and problems. Creative methods of problem solving are also explored. Methods of working effectively in teams are presented and team interaction is an integral part of every class. Throughout this course, students are required to apply the techniques presented to real-life situations.

Total Credits
Total Credit Hours:
3

Billing Hours ⓘ
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives
1. Apply basic fact-finding techniques to identify a problem.
2. Apply a variety of thinking tools to a problem to analyze its facets and formulate a solution.
3. Analyze possible problem solutions from a variety of perspectives.
4. Formulate a creative solution based on analyzation process
5. Recognize thinking "blocks" and implement methods to overcome them.
6. Identify the roles of team players
7. Recognize his/her own teamwork style
8. Distinguish the characteristics of effective and ineffective teams

IDS154 - Women & Gender Studies

Overview

Course Description
This interdisciplinary and multidisciplinary course asks students to engage in discussion about historical and contemporary issues in Women and Gender studies. Students will explore how gender intersects with class, race, sexuality, age, and ability within social institutions. The course will examine how androcentric power structures contribute to the oppression of women and marginalized populations, and how these power structures can be challenged through non-binary perspectives and scholarly practices. Through completing this course, students will be prepared to apply the critical tools of Women and Gender Studies to their academic, personal, and occupational lives.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition

Corequisites
ENG106 Introduction to Literature

IDS214 - Sel Topics in Ideas & Culture

Overview

Course Description
An interdisciplinary humanities and social science course designed to explore in depth a particular set of concepts or a culture. Every course will draw upon a variety of materials, including literary works, academic reports, journalistic accounts, musical pieces, films, paintings and/or sculptures; every course will also examine its topic from a variety of disciplinary perspectives. Where appropriate, travel may be incorporated into the course. The course topic will be selected at the instructor's discretion and may change from semester to semester. Possible topics might include: Italy Past and Present; Violence, War, and Genocide; Social and Economic Justice; Social Critique Through Music; Postmodernism; or Technology and Morality. enroll in semesters featuring the same theme: their transcripts will list the second enrollment as IDS 215.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition

Learning Objectives

Learning Objectives

1. Examine the course topic using a variety of source materials—scholarly, artistic, journalistic;
2. Evaluate and discuss the relative contributions and interrelationships of different disciplinary perspectives to the study of the course topic;
3. Apply an interdisciplinary approach to a specific research project.

IDS215 - Selected Topics Ideas & Cult

Overview

Course Description

An interdisciplinary, humanities and social science course designed to explore in depth a particular set of concepts or a culture. Every course will draw upon a variety of materials, including literacy works, academic reports, journalistic accounts, musical pieces, films, paintings and/or sculptures; every course will also examine its topic from a variety of disciplinary perspectives. Where appropriate, travel may be incorporated into the course. The course topic will be selected at the instructor's discretion and may change from semester to semester. Possible topics might include: Italy Past and Present; Violence, War, and Genocide; Social and Economic Justice; Social Critque Through Music; Postmodernism; or Technology and Morality.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

IDS214 Sel Topics in Ideas & Culture

Advisement Comments

This course is for students who have taken IDS 214 and wish to repeat that course for credit in a semester featuring a different theme.

Learning Objectives

Learning Objectives

1. Examine the course topic using a variety of source materials-scholarly, artistic, journalistic;
2. Evaluate and discuss the relative contributions and interrelationships of different disciplinary perspectives to the study of the course topic;
3. Apply an interdisciplinary approach to a specific research project.

IDS218 - Honors Research Seminar

Overview

Course Description

Provides a forum for discussion, analysis and presentation of research ideas, methods and topics for students who are in the Honors Scholars Program. Students are expected to be working concurrently on an Honors paper/project for another academic course and will present their project at the end of the course. Students will create and present an eportfolio.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Select and evaluate source material on its scholarly nature and for relevance and credibility.		1, 6
Demonstrate effective communication/presentation skills.		2
Demonstrate correct procedures for documentation of works cited.		1
Create and present an eportfolio.		1, 2, 5

IDS225 - Journalism

Overview

Course Description
The course is designed to prepare students for the ever-changing roles journalists now fill. Most reporters are asked to write, take photos, shoot video, and post items to the Internet on a daily basis. With a focus on good journalistic reporting and storytelling, students will learn how to prepare news, feature, profile and editorial stories for a variety of multimedia formats, including: print and online editions of LCCC's student newspaper "The Paw Print", online blogs, photojournalism, videos, and audio sound bites.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

IDS251 - Honors Reading Colloquium

Overview

Course Description
Provides an interdisciplinary forum for students in both tracks of the Honors Scholars Program to discuss two books, one in the social sciences and one in the natural sciences. Intended for Honors Scholars in their final semester.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
Course restricted for honor scholar students. Required course for fourth-semester students in the Honors Scholars Program.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Apply Reading Apprenticeship Techniques to texts.		2
Think critically about ideas in the social and natural sciences.		1

IDS270 - Disney College Prog Experience

Overview

Course Description
Students spend four to seven months at Walt Disney World, Lake Buena Vista, Florida or at the Disneyland Resort complex in Anahiem, California; students participate in the Disney College Program internship. Students who are chosen work in a major operating area in one of the theme parks, resorts, or entertainment venues such as Foods, Mechandise, Operations, Tickets, Water Recreation, and Transportation. Students are housed in apartments located near the Disney Resort complex. This course is a combination working, learning, and living experience that is open at all majors. Selection to participate in the program is competitive and is based upon approval by the Disney recruiting team.

Total Credits

Total Credit Hours:
6

Billing Hours ⓘ

Billing Hours Min:
6

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
Because students do a variety of tasks in this internship experience at Walt Disney World or Disneyland, course-specific, student learning competencies and objectives will vary. Included in all students internships will be the exposure to and development of the following competencies:

1. Students will learn and apply the Disney approach to quality service.
2. Students will learn and apply the Disney approach to people management.
3. Students will work daily as part of a team.
4. Students will learn specific safety procedures and emergency training associated with his/her work location.

5. Students will be exposed to and learn procedures to deal with guests from around the world.

6. Students will learn Disney's approach to effective communication.

7. As part of the living component of this internship, students will learn to cooperate with roommates in the Disney-assigned residencies.

NOTE: Means for addressing and measuring these objectives will be based upon Disney supervisors' instructions and evaluation.

IDS297H - Mindfullness for Acad. Success

Overview

Course Description
This course is a set of ten lessons, each teaching a distinct mindfulness skill, and designed to do so in a way which engages students. This course is designed to support academic success and is not therapeutic in nature. Use of visuals, film and sound images, and practical exercises and demonstrations make the ideas vivid and relevant to students' lives. Some objectives of this course include; to experience a greater well-being, to improve concentration and focus, and to learn basic skills to cope with the everyday stress.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

IDS297I - Research Based Strategies for Supporting ELL's in College English

Overview

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
Students are encouraged to shape the course content based on their particular concerns and instructional needs, and thus the course content may be expanded to address special topics raised by the course's participants.

By permission from faculty.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify the different types of second language learners and the implications for differing instruction.	Analyze Human Diversity
Employ current research to identify and apply instructional practices that promote writing and development of second language learners.	Think Critically Communicate Effectively
Exercise deep knowledge of English grammar and syntax to teach second language learners how English works and to develop meta-cognitive awareness as a strategy for improving writing and grammar.	Communicate Effectively
Employ current research on the connection between reading and writing to design lessons that provide context, background information, vocabulary, and rich models for effective writing.	Think Critically Communicate Effectively
Design lessons that help second language learners identify the features of effective academic writing and explore the connection between writing and the students' social identity.	Communicate Effectively Analyze Human Diversity
Develop and employ rubrics, writing frames, graphic organizers, checklists, and meta-language to create consistency and confidence in second language writers.	Apply Information Literacy Skills Use Current Technology Effectively
Develop through research and instruction and articulate a personal philosophy about writing that is inclusive and embraces best practices for second language learners and all student writers.	Evaluate Ethical Aspects of Decision Making Analyze Human Diversity Communicate Effectively

IDS297J - A Call for Social Justice

Overview

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
3

IET104 - Basic Electricity

Overview

Course Description
This course is a study of basic principles of voltage, current and resistance. Topics covered include basic circuit concepts of voltage, current and resistance, Ohm's Law, power, electrical distribution, and various circuit arrangements for both alternating and direct circuits.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
0

IET125 - Piping & Hydronic Heating

Overview

Course Description
The study and design of refrigeration and hydronic piping systems using computer based applications which provides the student with the necessary backgrounds and skills to perform various piping and tubing operations necessary in the field of air conditioning and refrigeration. Piping operations for heating systems, use of specialty tools and soldering are covered. Areas of piping, sizing of hydronic systems, zones, and troubleshooting hydronic heating systems and heat loss calculations are included utilizing computers.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

IET131 - Air Conditioning/Refrig I

Overview

Course Description

An introduction to air conditioning and refrigeration systems (residential, commercial, and light industrial) using new compressor technology and component designs to familiarize the student to the theory and application of the refrigeration cycle as it relates to comfort cooling and refrigeration equipment. Topics include piping skills, applications of metering devices and components related to the refrigeration cycle. Domestic refrigerators/freezers, room air conditioners, dehumidifiers, and small commercial refrigeration systems will be covered.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2

IET132 - Air Conditioning/Refrig II

Overview

Course Description

Focuses on the study and diagnostic interpretation of central air conditioning and refrigeration systems with an emphasis on mechanical & electrical applications. Using new technological instruments and equipment, the student will study the typical operating conditions to aid the systematic approach to the installation and service of residential and commercial HVACR systems.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2

IET135 - Domestic Oil Burners

Overview

Course Description

Introduces the student to the application and systematic approach to understanding the operation, maintenance, and servicing, and installing of residential oil burner systems. Included will be discussions on types of fuel oil, high-pressure burners, basic electrical wiring diagrams, electrical components, and combustion testing. Sizing nozzles, combustion chambers, and fuel pumps, as well as testing fuel units, will also be covered.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

IET140 - Electrical Maintenance I

Overview

Course Description
A continuation of the basic electricity course that is designed to help the student understand electrical circuits as they relate to the HVACR equipment. Topics for consideration include safety and operating switches; alternating current circuitry; single- and three- phase transformers and motors; relays, contactors and solenoid switches; control and timer circuits, wiring diagrams and symbols; and compressor testing. Electronic controllers used in the HVACR industry will be introduced to the student.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

IET145 - Adv Air Conditioning/Refrig

Overview

Course Description
The study and application of psychometrics and HVAC system design, incorporating computer based programming. Included is the application, installation and maintenance of HVAC equipment in residential, commercial, and light industrial environments. Topics covered are air conditioning operations, such as load estimating, air distribution, duct design and fabrication, psychometric operations, and balancing systems.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

IET150 - Heating Systems

Overview

Course Description
The study of current and new technology of heating systems that incorporates state-of-the-art electronic ignition systems and solid state controls. The operations of oil-fired, gas-fired, electric furnaces and heat pumps are covered. The subject of human comfort levels is an important component of this unit of study.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

IET155 - Electrical Maintenance II

Overview

Course Description
A continuation of IET 140, including the study and application of single and three phase voltage systems, motors, controls, programmable logic control devices and components. Emphasis is placed on troubleshooting, maintenance and repair of motors, controls, lighting, and HVAC equipment. The introduction to electronic devices, controls associated with HVAC equipment, and energy management systems will also be discussed.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

IET160 - Residential Wiring

Overview

Course Description
Provides background in house wiring. Examines the application of electrical layouts, installations, testing and maintenance of electrical circuits, fixtures, low voltage systems, pool wiring, saunas, GFCI grounding, and related apparatus used in residential electrical systems.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

IET200 - App. Troubs. & Cert. in HVACR

Overview

Course Description
A culmination of the study of heating, ventilation, air conditioning, and refrigeration, this course will focus on electrical schematic diagram reading, a systematic approach to electrical and mechanical diagnostics and troubleshooting and customer relations. The student will attempt to pass any two of three Industry Competency Exams and must pass at least Type 2 EPA Certification as a requirement for completing this course.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
2

Lab Hours
Lab Hours (per week):
0

IET205 - Gas Heat/Heat Pumps

Overview
Course Description
IET 205 is a two-part course that deals with the complexities of both gas heating systems and heat pump, installation,application and servicing. Gas Heat covers topics ranging from fundamentals of combustion to the evolution high efficiency units. The Heat Pump section covers air-to-air and water-source systems. Both components include start-up procedures and yearly maintenance. The course combines hands-on experiences to compliment the technical learning.

Total Credits
Total Credit Hours:
4

Billing Hours
Billing Hours Min:
4

Lecture Hours
Lecture Hours (per week):
4

IET250 - Commercial & Industrial Wiring

Overview
Course Description
Provides the student understanding and experience in the layout and construction of electrical circuits as they relate to commercial and industrial installations. Builds upon the knowledge and experience the student gained from the Residential Wiring Course (IET160). Topics for consideration include electrical safety; commercial and industrial blueprint reading; feeder bus systems; signaling systems; site lighting; and panel board selection and installation; and conduit bending.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
2

KBD101 - Intro to Interior Design

Overview

Course Description
This course provides students with the basic compounds of the interior design field. Students will learn the principles of color, form, and space as it applies to interior spaces. Period styles, furnishings, lighting and colors, materials and textures, and design principles will be covered. Other areas of study will be ergonomics and functionality.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

KBD102 - Color and Textures

Overview

Course Description
This course provides students with the basic principles of color and texture as it relates to interior design. Under- standing the use of colors and textures provides different psychological looks and feel that students will be able to experiment with thru various class-related projects.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

KBD103 - Interior Finishing

Overview

Course Description
Provides the student with techniques necessary to finish the interior of residential and light commercial structures. The student will be exposed to a variety of materials commonly used in finish construction as well as the proper procedure for installation. This course will require students to demonstrate several techniques studied in this course on a building project.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CON101 Basic Architectural Drafting

KBD103L - Interior Finishing Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

KBD104 - Kitchen/Bath Design Prin

Overview

Course Description
This course familiarizes the student with the basic principles of kitchen/bath equipment and the mechanical systems needed to make them function properly. As a result of this exposure thru classroom lecture and demonstrations, each student will gain a greater awareness and understanding to allow them to design effective and efficient room layouts.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CON101 Basic Architectural Drafting

KBD105 - Kitchen/Bath Cad Design

Overview

Course Description
Provides the student with the use of the microcomputer for kitchen/bath designs. A software package presently used by experienced designers will be utilized throughout this course for industry compliance. Project designs will be done completely on computer and finished designs will be printed out for presentation purposes.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
CON101 Basic Architectural Drafting

KBD201 - Kitchen/Bath Graphic Design

Overview

Course Description
This course is a CAD based design course intended for students to produce formalized kitchen and bath design projects determined by the NKBA student design requirements. Floor plans, Construction, Electrical, and Elevation drawings specifically related to the kitchen/bath industry will be produced. Students will also be introduced to commercial design projects by specifying restaurant/cafeteria related equipment to be included in each design.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
3

Requirements

Prerequisites
KBD104 Kitchen/Bath Design Prin, MET111 Computer Aided Drafting

KBD201L - Kitchen/Bath Graphic Des Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
3

KBD202 - Kitchen/Bath Estimating

Overview
Course Description
This course familiarizes the student with the basic principles of interior design estimating. Topics covered will deal with cabinets, appliances, lighting, wall and window treatments, flooring materials, and the labor involved to effectively furnish kitchen and bath areas. Students will learn these principles and apply them thru several case studies throughout the course.

Total Credits
Total Credit Hours:
2

Billing Hours
Billing Hours Min:
2

Lecture Hours
Lecture Hours (per week):
2

Requirements
Prerequisites
KBD103 Interior Finishing

KBD203 - Kitchen and Bath Studio

Overview
Course Description
This course will provide students the opportunity to focus their design skills in the area of kitchens and baths. Students will design kitchen and bath layouts based on given criteria and specifications. Upon completion of their finished design layout, the students will then install the cabinets, countertops, and trim work to complete the project.

Total Credits
Total Credit Hours:
4

Billing Hours
Billing Hours Min:
4

Lecture Hours
Lecture Hours (per week):
3

Requirements

Prerequisites
KBD101 Intro to Interior Design, KBD103 Interior Finishing

Corequisites
KBD105 Kitchen/Bath Cad Design

KBD203L - Kitchen & Bath Studio Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

MAT090 - Mathematical Literacy

Overview

Course Description
Designed to prepare the student for a successful transition to college level mathematics. Addresses topics including evaluating numerical expressions composed of whole numbers, integers, signed fractions and decimals, rates, ratios, and percents; simplifying and evaluating a variety of algebraic expressions and polynomials in one or more variables and using exponent laws; solving first-degree equations and inequalities in one variable, proportions, and percent equations; creating scattergrams and graphing algebraic equations in two variables; using critical thinking and modelling skills to solve a variety of authentic application problems. A scientific or graphing calculator is required for this course. NOTE: This course cannot be used to satisfy the mathematics requirement in any program, without approval of the program coordinator.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Entry Level

Advisement Comments
Prealgebra (5th Edition) by Lial and Hestwood, Pearson Education, Inc. Boston, 2014.

Elementary Algebra: Graphs & Authentic Applications (2nd Edition), by Lehmann, Pearson Education, Inc. Boston, 2015.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Evaluate numerical expressions composed of whole numbers, integers, signed fractions and decimals, rates, ratios, and percents.		Apply quantitative reasoning
Simplify and evaluate a variety of algebraic expressions and polynomials in one or more variables and use exponent laws.		Apply quantitative reasoning
Solve first-degree equations and inequalities in one variable, proportions, and percent equations.		Apply quantitative reasoning
Graph algebraic equations in two variables		Apply quantitative reasoning

MAT105 - Intermediate Algebra

Overview

Course Description

An overview of basic algebraic concepts to prepare students for more advanced work in mathematics. Emphasizes fundamental operations, special products and factors, fractional expressions, functions and graphs, systems of equations, integral and fractional exponents, radicals, and quadratic equations and functions. NOTE: MAT 105 is not to be taken by the student who has successfully ("C" or better) completed a mathematics course at or above the MAT 130 level. A graphing calculator is required (TI-83 or TI-83 PLUS is preferred).

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Math Placement - Intro Level

Advisement Comments

A combination of lecture and discussion is used throughout the course. Technology demonstrations will be shown via the use of a computerized emulator which allows the students to see the actual calculations, tables, graphs, etc., that the instructor is entering into his/her calculator. A graphing calculator is required (TI – 83 or 84 Plus is preferred) and will be used extensively in the course. Graphing calculator assistance is offered on the Math department's home page via web enabled snippets for those students who are not familiar with using a graphing calculator.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Solve equations involving quadratic equations and functions.	Think critically; apply quantitative reasoning
2. Factor polynomials to solve equations	Think critically; apply quantitative reasoning
3. Simplify and solve rational expressions and equations.	Think critically; apply quantitative reasoning
4. Solve systems of linear equations.	Think critically; apply quantitative reasoning

MAT118 - Business & Financial Math

Overview

Course Description
Assists the student in developing proficiency in the mathematical skills required in business. Among items studied are percentages, cash and trade discounts, retail pricing, payroll, simple interest and discount, taxes, installment purchases, insurance protection, compound interest, annuities, mortgages, and other amortized loans. A scientific or finanacial calculator is required for this course.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Solve applications involving percent (increase and decrease, trade and cash discounts, markup and markdown).	Think critically, apply quantitative reasoning
2. Perform calculations pertaining to payroll (gross earnings and withholding).	Think critically, apply quantitative reasoning
3. Explain the concepts and calculate amounts related to bank services.	Think critically, apply quantitative reasoning
4. Calculate taxes (sales, income, and property).	Think critically, apply quantitative reasoning
5. Solve applications involving simple interest and simple discount.	Think critically, apply quantitative reasoning
6. Solve applications involving compound interest, annuities, and installment loans.	Think critically, apply quantitative reasoning
7. Solve applications related to consumer credit and insurance protection (Fire, Motor Vehicle, and Life).	Think critically, apply quantitative reasoning

MAT120 - Survey of Mathematics

Overview

Course Description
This course exposes the student to a variety of discrete mathematical tools. The following topics will be included: foundations of mathematics, problem-solving strategies, introduction to set theory, and an introduction to counting, probability and statistics. This course will focus on the development of critical-thinking and problem-solving skills from an analytical standpoint. A scientific calculator is required for this course.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
Only Non-STEM students should take this course.

Resources
A scientific calculator is required, and should be used throughout the course, as appropriate. Additional use of technology can enhance many of the topics in this course. Spreadsheets, graphing and solving software, statistical packages, and drawing/graphic design software packages are available on the computers accessible to the students.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Use a variety of reasoning and problem-solving skills.	Think critically; apply quantitative reasoning
2. Solve problems by using introductory set theory.	Think critically; apply quantitative reasoning
3. Apply the rules of probability to a variety of applications.	Think critically; apply quantitative reasoning
4. Organize and interpret data by using a variety of statistical techniques.	Think critically; apply quantitative reasoning

MAT121 - Mathematics for Allied Health

Overview

Course Description
Includes applications of dosage computations, the metric and customary systems, and unit conversion as needed in health fields. Additional investigations in critical thinking, graph interpretation, logical thinking, and statistical reasoning will be explored from both a health-related and a mathematical point of view.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Intro Level

Advisement Comments
Requires placement and 2 years high school Algebra.

MAT 121 and MAT 150 or MAT 121 and BUS 150 cannot both be taken for credit. A scientific calculator is required

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Compute dosages based on the strength ordered and the strength available		1,3
Convert units within and between the metric, customary, apothecary, and household measurement system.		1,3
Compute dosages based on strength ordered, strength available and Weight for adults and pediatrics		1,3
Calculate infusion completion times		1,3
Basic arithmetic review without the use of a calculator		3

MAT125 - Fund of Math I

Overview

Course Description

Designed for the future elementary, special education or early childhood teacher only. Revisits school mathematics topics as recommended by the NCTM Principles and Standards with an emphasis problem solving in an activity-based environment. Included are set theory and functions, logic and deductive reasoning, the development of our numeration system, operations and number theory. A scientific calculator is required.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Math Placement - Mid-Level

Learning Objectives

Learning Objectives

1. Determine patterns and select an appropriate method to solve problems.
2. Communicate mathematical ideas by using set theory and functions.
3. Analyze, compare features and perform whole-number computation in various numeration systems.
4. Analyze the nature of integers, rational numbers, and irrational numbers.
5. Explain the rationale behind the algorithms and models of basic mathematical operations with integers, rational numbers and decimals.

MAT126 - Fund of Mathematics II

Overview

Course Description

Designed for future elementary, special education or early childhood teachers only. Revisits school mathematics topics as recommended by the NCTM Principles and Standards with an emphasis on problem solving in an activity-based environment. Includes probability, statistics, geometry and measurement. A scientific calculator is required.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT125 Fund of Math I

Learning Objectives

Learning Objectives

1. Apply the basic concepts of probability.
2. Select and use appropriate statistical methods to analyze data.
3. Analyze characteristics and properties of two- and three-dimensional geometric shapes.
4. Determine and apply the concepts of congruence and similarity.
5. Apply appropriate techniques, tools, and formulas to determine measurements.
6. Describe sizes, positions and orientations of shapes through transformations.

MAT130 - Industrial Mathematics

Overview

Course Description
Designed for students interested in a technical program. Emphasis is on utilization of basic mathematical concepts. Topics include algebraic applications, trigonometric functions and graphs, geometry, functions, equations, vectors, and introductory statistical process control. Note: MAT 130 is designed for the student who does not plan to pursue a four-year college degree. It is not designed to serve as a prerequisite for MAT 160, 165, 170, or 190. A graphing calculator is required for this course (TI-83 or TI-83 Plus preferred).

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Mid-Level

Learning Objectives

Learning Objectives

1. Apply basic concepts and operations that deal with accuracy and precision, symbolic representation, and algebra.
2. Determine the basic trigonometric function relationships and solve right triangle applications.
3. Solve problems that require using trigonometric functions of angles of any magnitude.
4. Apply formulas for calculating basic geometric measurements.
5. Combine vectors and solve related applications.
6. Apply statistical techniques to data sets and interpret quality control results.

MAT150 - Intro Probability & Statistics

Overview

Course Description

For students in programs where measurements and predictions are made. Topics include the following: tabulation of data, measures of central tendency and dispersion, sampling, types of distribution, probability, hypothesis testing, and elementary aspects of correlation. A TI-84 PLUS is required.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Math Placement - Mid-Level

Learning Objectives

Learning Objectives

Course Objective	Program Objective and/or Collegewide Student Competency
1. Analyze problems that employ the nature of data and statistics.	Think critically, apply quantitative reasoning
2. Summarize, describe, explore and compare data.	Think critically, apply quantitative reasoning
3. Apply elementary concepts of probability and counting techniques.	Think critically, apply quantitative reasoning
4. Create and interpret probability distributions.	Think critically, apply quantitative reasoning
5. Use the normal distribution to find probabilities for discrete and continuous variables.	Think critically, apply quantitative reasoning
6. Estimate the value of a parameter by using a confidence interval.	Think critically, apply quantitative reasoning
7. Test a hypothesis involving large and small samples for a continuous variable.	Think critically, apply quantitative reasoning
8. Develop and analyze a least squares linear regression line and a correlation coefficient.	Think critically, apply quantitative reasoning

MAT155 - Finite Math for Bus/Social Sci

Overview

Course Description
Provides the student with an introduction to linear functions, linear systems, linear programming, matrix algebra, nonlinear models, sets and probability. Applications in business, finance, and the social sciences will be emphasized. A graphing calculator is required.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Mid-Level

Learning Objectives

Learning Objectives
1. Form a linear model algebraically and with a graphing utility.
2. Solve systems of linear equations.
3. Perform operations with matrices.
4. Apply linear programming techniques using graphing and the simplex method to find optimal solutions.
5. Express relations and perform basic operations using set theory.
6. Explore the basic definitions of probability and develop techniques for computing probabilities of certain events.
7. Create nonlinear functions using a graphing utility to model real-life phenomena.

MAT160 - College Algebra

Overview

Course Description
Emphasizes such topics as exponents and radicals, factoring, complex numbers, rational expressions, functions and their graphs, shifting, stretching/compressing, and reflecting graphs, inverse functions, solving linear and nonlinear equations and inequalities both algebraically and graphically, polynomial and rational functions, rational zeros theorem, exponential and logarithmic functions, systems of linear and nonlinear equations, and using basic matrix algebra to solve systems of equations.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Mid-Level

Advisement Comments
This course is for students preparing to take Calculus.

Learning Objectives

Learning Objectives

1. Simplify algebraic expressions involving absolute values, polynomials, exponents, radical, rational, exponential, or logarithmic expressions.
2. Solve problems that can be modeled with polynomial, radical, rational, exponential, or logarithmic equations or inequalities.
3. Determine the equations and graphs for functions using various techniques; form combinations, inverses and compositions of functions.
4. Analyze data and solve problems through linear and non-linear regression equations.
5. Find zeros of polynomials using the Rational Zeros Theorem and use that to solve polynomial equations.
6. Solve systems of linear and non-linear equations using substitution and elimination.
7. Use matrices to solve systems of equations.

MAT165 - College Trigonometry

Overview

Course Description
This course offers a rigorous approach to both the theory and application of basic trigonometry and related geometric considerations. Topics include trigonometric functions, radian measure, graphing, identities and equations, inverse functions, vectors, conic sections, parametric equations, and polar curves. A graphing calculator is required.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Upper Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Apply the six trigonometric functions and identify and utilize the fundamental relations involving them.	Think critically, Apply quantitative reasoning
2. Graph functions that involve trigonometric functions. This includes the use of graphing technology	Think critically, Apply quantitative reasoning, Use current technology effectively
3. Use inverse functions, the Law of Sines and the Law of Cosines to solve triangles	Think critically, Apply quantitative reasoning
4. Solve trigonometric equations both analytically and using graphing technology	Think critically, Apply quantitative reasoning, Use current technology effectively
5. Solve applied problems involving trigonometry and its applications, including the use of vectors, and communicate what those solutions mean in real-world terms	Think critically, Apply quantitative reasoning, Communicate effectively
6. Graph curves expressed as parametric as well as polar equations, both analytically and using graphing technology	Think critically, Apply quantitative reasoning, Use current technology effectively
7. Recognize the equations of the various conic sections, and be able to analyze and graph them in rectangular, polar, or parametric forms.	Think critically, Apply quantitative reasoning, Use current technology effectively

MAT170 - Precalculus

Overview

Course Description

Designed for students whose backgrounds are not sufficient to immediately begin the calculus sequence. Serves any student looking for a mature investigation of algebra and trigonometry. This one-semester course covers the topics included in MAT 160 and MAT 165 at a relatively rapid pace. Topics include: polynomials, systems of equations, sequences and series, trigonometric functions and graphs, inverse functions, exponential and logarithmic functions, identities and equations, parametric equations, and polar curves. A graphing calculator is required (TI-83 or TI-83 PLUS is preferred).

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

4

Requirements

Placement Exam Requirements

Math Placement - Advanced Level

Learning Objectives

Learning Objectives

As the name of this course suggests, the primary objective is to offer in a single semester the mathematics needed to proceed to the calculus sequence.

Precalculus can also serve as a terminal course in a more advanced setting than College Algebra and College Trigonometry for those with appropriate backgrounds.

At the conclusion of the course, the student will be able to:

1. Simplify algebraic expressions involving polynomials, exponents, radicals, and rational expressions.
2. Solve linear and quadratic equations; linear, quadratic, and rational inequalities; and equations involving absolute values and radicals.

3. Graph functions, determine equations for linear and quadratic functions, and find inverse and composite functions.
4. Graph and analyze exponential and logarithmic functions, including the solution of related equations.
5. Solve problems involving right-angle trigonometry, the laws of sines and cosines, basic trigonometric identities, trigonometric equations, and inverse trigonometry.
6. Analyze data using linear and non-linear regression.
7. Find terms and sums of sequences.
8. Solve systems of linear and non-linear equations.
9. Graph curves expressed in either parametric or polar coordinates.
10. Use a graphing calculator in conjunction with all of the above stated objectives, which includes graphing, using tables, solving equations, and finding models.

MAT188 - Business Calculus

Overview

Course Description
Designed for students in business programs. Topics covered include linear, quadratic, polynomial, rational, exponential and logarithmic functions, differtial and integral calculus of a sign variable; and various applications to business and economics.NOTE: This course is not to be taken in place of MAT 191 (Calculus & Analytic Geometry I) and does not serve as a prerequisite for MAT 196 (Calculus & Analytic Geometry II). A graphing calculator is required (TI-83/84 or 83/84 PLUS referrred).

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Upper Level

Learning Objectives

Learning Objectives
1) Use algebraic problem solving techniques of linear, quadratic, polynomial, rational, exponential and logarithmic functions and apply to business/economics settings.

2) Find the limit of a function.

3) Find the derivatives of functions using various rules and apply the derivative to problems involving curve-sketching, optimization, elasticity, and other applications to business/economics.

4) Find definite and indefinite integrals and apply to such topics as area, average value and consumer/producer surplus.

MAT191 - Calculus & Analytic Geometry I

Overview

Course Description
Primarily intended for students majoring in science, mathematics or engineering. Topics include data analysis, limits, differentiation with applications (optimization and related rates), definite and indefinite integration. Also included are Newton's Method and Applications of Integration. Graphing calculators are not permitted. Scientific calculators are recommended.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
4

Requirements

Placement Exam Requirements
Math Placement - Advanced Level

Advisement Comments
Prerequisite(s): Advanced Level Math Placement and High School Trigonometry; or both MAT 160 and MAT 165; or MAT 170

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Model physical situations using a variety of functions.	Think critically, apply quantitative reasoning
2. Fit models to data.	Think critically, apply quantitative reasoning
3. Find limits and deal with areas as limits.	Think critically, apply quantitative reasoning
4. Find derivatives and apply them.	Think critically, apply quantitative reasoning
5. Use derivatives and graphing utilities to thoroughly analyze curves.	Think critically, apply quantitative reasoning
6. Find integrals and apply them to area, distance, and average values.	Think critically, apply quantitative reasoning
7. Solve equations using Newton's Method with a graphing calculator.	Think critically, apply quantitative reasoning
8. Use integration to find areas, volumes, lengths of curves, surface areas, centroids, fluid pressure, and applications involving rectilinear motion.	Think critically, apply quantitative reasoning

MAT196 - Calc & Analytic Geometry II

Overview

Course Description
A continuation of MAT 191. Topics covered include transcendental and hyperbolic functions, techniques of integration, numeric methods of integration, improper integrals, Euler's method, probability, first-order differential equations, infinite sequences and series, parametric equations and polar coordinates, along with conic sections.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
4

Requirements

Prerequisites
MAT191 Calculus & Analytic Geometry I

Advisement Comments
Prerequisite(s): MAT 191 (at least a "C")
A graphing calculator is required. The TI-83 or TI-84 is recommended.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Integrate and differentiate expressions involving inverse trigonometric, logarithmic, exponential, and hyperbolic functions		1, 3
Integrate using methods of partial fractions, parts, trigonometric methods, substitutions, and tables.		1, 3
Evaluate definite integrals using the Trapezoidal Rule and Simpson's Rule with a computer and/or graphing calculator.		1, 3
Evaluate improper integrals.		1, 3
Evaluate first order linear differential equations and solve application problems involving equations of this type.		1, 3
Test for convergence of infinite series and find their sums.		1, 3
Express various functions as power series.		1, 3
Graph polar and parametric equations.		1, 3
Find arc length and area involving polar and parametric equations.		1, 3

MAT201 - Calc & Analytic Geometry III

Overview

Course Description
Investigates the algebra of vectors. Includes such topics as vector functions, vector calculus, partial differentiation, and multiple integrals. Graphing calculators are not permitted. A scientific calculator is required.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
4

Requirements

Prerequisites
MAT196 Calc & Analytic Geometry II

Advisement Comments
Prerequisite(s): MAT 196 (at least a "C")

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Use vectors in a variety of geometric applications.	Think critically, apply quantitative reasoning
2. Sketch graphs of three-dimensional quadric surfaces.	Think critically, apply quantitative reasoning
3. Use vector functions to describe the position of a particle in space at time *t*.	Think critically, apply quantitative reasoning
4. Find derivatives and integrals of vector-valued functions and apply to position, velocity and acceleration.	Think critically, apply quantitative reasoning
5. Find partial derivatives and apply them to finding extrema of functions of several variables.	Think critically, apply quantitative reasoning
6. Find and interpret the gradient and directional derivative.	Think critically, apply quantitative reasoning
7. Evaluate double and triple integrals and apply them to such physical concepts as surface area, volume, and center of gravity.	Think critically, apply quantitative reasoning

MAT203 - Discrete Mathematics

Overview

Course Description
Designed for students majoring in mathematics or computer science and others desiring a broader mathematics perspective. Topics include logic, sets, methods of proof, relations, functions, mathematical induction, counting techniques, probability, recurrence relations, mathematical systems, and graph theory.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT191 Calculus & Analytic Geometry I

Advisement Comments
Prerequisite(s): MAT 191 (at least a "C")

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Form, interpret, and determine the truth value of statements by using logic.	Think Critically
2. Perform operations on statements such as converse, contrapositive, and inverse using logic and quantifiers.	Think Critically
3. Perform operations on sets and use properties of sets.	Think Critically
4. Identify tyrpes of relations and functions and use functions to form other functions.	Think Critically
5. Apply the counting techniques appropriately and utilize in computing probabilities.	Think Critically, Apply Quantitative Reasoning
6. Solve recurrence relations.	Think Critically, Apply Quantitative Reasoning
7. Utilize aspects of graph theory such as circuits and trees	Think Critically

MAT210 - Linear Algebra

Overview

Course Description
An introduction to matrices and matrix algebra. Topics discussed include matrix operations, inverses of matrices, solving systems of linear equations, determinants, real vector spaces and inner product spaces, linear transformations, eigenvalues and eigenvectors, and applications. A computer algebra system will be utilized to assist with solving some of the problems in this course.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT191 Calculus & Analytic Geometry I

Corequisites
MAT196 Calc & Analytic Geometry II

Advisement Comments
This course is required for all Mathematics majors. Students looking to go into careers in Mathematics, Physics, Engineering, Computer Science, Chemistry, Finance, Economics, Computer Graphics, Machine Learning, etc. would benefit from this course.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Use matrices to solve systems of linear equations.	Think critically, apply quantitative reasoning
2. Find the inverse and factorization of a matrix.	Think critically, apply quantitative reasoning
3. Use matrices to describe linear transformations.	Think critically, apply quantitative reasoning
4. Find the null space, column space, basis, dimension, and rank for a real vector space.	Think critically, apply quantitative reasoning
5. Solve applications of difference equations and Markov Chains.	Think critically, apply quantitative reasoning
6. Find eigenvalues/eigenvectors and diagonalize a matrix.	Think critically, apply quantitative reasoning
7. Work with inner product spaces and orthogonality.	Think critically, apply quantitative reasoning
8. Use a computer algebra system to solve problems in linear algebra.	Think critically, apply quantitative reasoning, Use current technology effectively

MAT230 - Differential Equations

Overview

Course Description
Ordinary differential equations of the first and second order with applications, operators, Laplace Transforms, vibration analysis, electrical circuits, and solutions in series are examined. Matrix algebra is introduced and applied to find characteristic vectors and solutions to systems of linear differential equations. A graphing calculator is required (TI-83 or TI-83 PLUS is preferred).

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
4

Requirements

Prerequisites
MAT201 Calc & Analytic Geometry III

Advisement Comments
Prerequisite(s): MAT 201 (at least a “C”)

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Recognize and classify basic differential equations.	
2. Solve first-order and higher-order differential equations and their applications.	
3. Utilize Laplace transforms and related theory to solve differential equations.	
4. Solve linear differential equations by infinite series.	
5. Use numerical techniques to approximate solutions of first-order differential equations.	
6. Solve systems of linear differential equations, both analytically and by matrix methods.	
7. Determine characteristic values and vectors.	
8. Analyze slope fields and phase plane trajectories	

MAT250 - Selected Topics in Math I

Overview

Course Description

An interdisciplinary math and science course designed to introduce students to various topics within the natural sciences and their mathematic components. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include the human genome project, string theory, stem cell research, history of science, endocrine disruption, global environmental issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as MAT 251.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Use critical thinking skills to evaluate scientific data and interpret its significance	Think Critically
2. Demonstrate literacy in issues related to natural science that are of current global scientific concern	Apply Information Literacy Skills
3. Demonstrate effective communication and listening skills	Communicate Effectively
4. Demonstrate the ability to discuss the quality and validity of potential scientific information	Apply Scientific Reasoning

MAT251 - Selected Topics in Math II

Overview

Course Description
An interdisciplinary math and science course designed to introduce students to various topics within the natural sciences and their mathematic components. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include the human genome project, string theory, stem cell research, history of science, endocrine disruption, global environmental issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as MAT 251.

Total Credits

Total Credit Hours:
1

Billing Hours ◈

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
MAT191 Calculus & Analytic Geometry I

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Use critical thinking skills to evaluate scientific data and interpret its significance	Think Critically
2. Demonstrate literacy in issues related to natural science that are of current global scientific concern	Apply Information Literacy Skills
3. Demonstrate effective communication and listening skills	Communicate Effectively
4. Demonstrate the ability to discuss the quality and validity of potential scientific information	Apply Scientific Reasoning

MED103 - Clinical Procedures I

Overview

Course Description
Students will learn the fundamental skills of Medical Assisting: blood pressure, pulse, respiration, and temperature. Infection control, personal protective equipment and maintaining standard precautions is also introduced. Medical and surgical asepsis and the use of the autoclave will be presented. Assisting in physical exams and office procedures will be taught.

Total Credits

Total Credit Hours:
3

Billing Hours ◈

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Requirements

Corequisites

HIT120 Medical Terminology, MED107 Medical Assisting I

Advisement Comments

The student must achieve a “C” (73%) or above in all MED courses in order to enter this course. If a student falls below the “C”, he/she will not be able to progress into the subsequent Medical Assistant courses until the course is offered again and has been mastered.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Exhibit critical thinking using the medical assistant's role and responsibilities during provider assistance during a physical examinations and patient screening protocols.	1	1-think critically 2- communicate effectively 4- Participate cooperatively within a team 7- observe and analyze the diverse human experience
Perform accurate blood pressure, pulse rate, respiratory rate and temperature in all lab sessions	1, 3	1-think critically 2-communicate effectively 5-use current technology effectively
Participate in collecting a urine specimen for urinalysis following CLIA's waived microbiology test protocol	1, 3, 6	1-think critically 3- apply quantitative reasoning 8- Apply scientific reasoning 9-evaluate ethical aspects of decision making
Practice efficacy of performance of a 12-lead electrocardiogram.	4, 5, 6	1-think critically 2-communicate effectively 5-use current technology effectively 6- Apply literacy skills
Identify with specimen collection and completing a requisition form for specimen collection for courier pick up and documentation.	1,3	1-think critically 2-communicate effectively 5-use current technology effectively 6- Apply literacy skills
Execute efficacy of sterile technique during sterile surgical tray set up and maintenance of a sterile field.	1, 2, 3, 4 5 & 6	2_ communicate effectively 3- participate cooperatively within a team
Implement OSHA, and CDC, infection and safety constructs during lab practices and testing in different medical case scenario practices.	1, 2, 3, 4 5 & 6	1-think critically 2- communicate effectively 4- Participate cooperatively within a team 7- observe and analyze the diverse human experience

MED103L - Clinical Procedures I Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lecture Hours
Lecture Hours (per week):
0

Lab Hours
Lab Hours (per week):
3

MED107 - Medical Assisting I

Overview
Course Description
This course introduces pharmacology continues through the study of drug sources, uses, actions, adverse effects, contraindications, allergic reactions. Drugs will be introduced in relation to multiple disease processes. Pharmacologic math and medication calculations will also be introduced. First aid and emergency procedures in the health care provider's office will also be emphasized. Current CPR certification-Health Care Provider from the American Red Cross or the American Heart Association is required by the completion of this class.

Total Credits
Total Credit Hours:
5

Billing Hours
Billing Hours Min:
5

Lecture Hours
Lecture Hours (per week):
5

Requirements
Corequisites
HIT120 Medical Terminology, MED103 Clinical Procedures I

Advisement Comments
The student must achieve a “C” (73%) or above in all MED courses in order to enter this course. If a student falls below the “C”, he/she will not be able to progress into the subsequent Medical Assistant courses until the course is offered again and has been mastered.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify different cultural practices that influence medical beliefs and practices.	5	7 – Analyze human diversity
Explain the role and responsibilities of the medical assistant within the administrative and clinical components of working and with the healthcare team.	1, 2, 3 & 6	4- participate cooperatively within a team 2- Apply Quantitative reasoning 5- Use current technology
Recognize the American Disabilities Act and the Patient's Bill of Rights in relationship to patient care.	5 & 6	9 – Evaluate ethical aspects of decision making
Discuss principle of medical law and ethics involved in the healthcare setting in the role as a professional medical assistant	4 & 6	9 – Evaluate ethical aspects of decision making
Compare the human body systems' structural and physiological constructs in relationship to pathophysiology.	1&3	1- Think critically 8- Apply scientific reasoning
Review differing verbal and written communication processes that construct therapeutic environments in relationship to professionalism	1 & 4	2 – Communicate effectively 6- Literacy skills

MED203 - Clinical Procedures II

Overview

Course Description

This course facilitates students to perform more advanced clinical procedures that may be required in various physicians' offices, such as: Medication administration, CLIA diagnostic testing and different specimen collections, and blood and capillary blood draws. The role of the medical assistant will be supported for specialty populations with differing exam room preparation, and patient education involving all aspects of patients' clinical situations and care.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2

Requirements

Prerequisites

MED103 Clinical Procedures I, MED107 Medical Assisting I, HIT120 Medical Terminology

Corequisites

HCO102 Management Practices & Tech., HIT255 CPT and Other Class Systems, MED207 Medical Assisting II

Advisement Comments

The student must achieve a "C" (73%) or above in all MED courses in order to enter this course. If a student falls below the "C", he/she will not be able to progress into the subsequent Medical Assistant courses until the course is offered again and has been mastered.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Administer oral and parenteral medications utilizing all seven rights of drug administration using critical steps	1,6	1-critical thinking 3-apply quantitative reasoning 8- apply scientific reasoning 9-evaluate ethical aspects of decision-making
Manipulate appropriate techniques during specimen collection for CLIA waved diagnostic tests	1, 2, 4	1-critical thinking 3-apply quantitative reasoning 5- use current technology 6- apply information literacy skills 8- apply scientific reasoning
Compare and apply the medical responsibilities for special populations, in all clinical aspects of care	1, 2, 3, 4, 5, 6,	1-critical thinking 2-communicate effectively 3-apply quantitative reasoning 4-Participate cooperatively within a team 5- use current technology 6- apply information literacy skills 7- observe and analyze the diverse human experience 8- apply scientific reasoning 9- evaluate ethical aspects of decision-making
Design patient education brochures for pharmacological treatments	2, 5	2- communicate effectively 7- Observe and analyze the diverse human experience

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Assess different medical office emergencies/ disasters and compare them with care treatment modalities	1, 2, 3, 4, 5, 6,	1-critical thinking 2-communicate effectively 3-apply quantitative reasoning 4-Participate cooperatively within a team 5- use current technology 6- apply information literacy skills 7- observe and analyze the diverse human experience 8- apply scientific reasoning 9- evaluate ethical aspects of decision-making
Implement the medical assistant roles and responsibilities during care of a simulated patient encompassing all learned clinical skills taught within the MEDC according to a patient's needs with inclusion of the healthcare team.	1, 2, 3, 4, 5, 6,	1-critical thinking 2-communicate effectively 3-apply quantitative reasoning 4-Participate cooperatively within a team 5- use current technology 6- apply information literacy skills 7- observe and analyze the diverse human experience 8- apply scientific reasoning 9- evaluate ethical aspects of decision-making

MED203L - Clinical Procedures II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
3

MED207 - Medical Assisting II

Overview

Course Description
This course introduces pharmacology: study of drug sources, uses, actions, adverse effects, contraindications and allergic reactions. Drugs will be introduced in relation to multiple disease processes. Pharmacologic math and medication calculations will also be introduced. Caring for special populations such as, pediatrics, geriatrics, psychology and obstetrics will be introduced. Current CPR certification-Health Care Provider from the American Red Cross or the American Hearth Association is required by the completion of this class. First aid, emergency procedures and disaster preparedness in the health care provider's office will be emphasized.

Total Credits

Total Credit Hours:
5

Billing Hours ⓘ

Billing Hours Min:
5

Lecture Hours

Lecture Hours (per week):
5

Requirements

Prerequisites
MED103 Clinical Procedures I, MED107 Medical Assisting I, HIT120 Medical Terminology

Corequisites
HCO102 Management Practices & Tech., HIT255 CPT and Other Class Systems, MED203 Clinical Procedures II

Advisement Comments
The student must achieve a “C” (73%) or above in all MED courses in order to enter this course. If a student falls below the “C”, he/she will not be able to progress into the subsequent Medical Assistant courses until the course is offered again and has been mastered.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Interpret care for special populations using specific concepts related to pediatrics, obstetrics, psychology, and the geriatric patients.		
Categorize key constructs of emergency and disaster protocols and procedures of first aid and treatments within the health care setting.		
Correlate the pathophysiology of diseases to pharmacologic therapeutic treatments, side effects, adverse effects and contraindications.		
Create patient teaching brochures for both diagnostics and medical treatments specific to diseases.		
Differentiate between blood cells, counts, diagnostic tests in relationship to disease treatments.		
Justify accurate medication reconciliation and mediation calculations for ethical and safe clinical practices.		

MED213 - Clinical Experience

Overview

Course Description
As the capstone to the Medical Assisting Program, students will complete 225 hours of clinical experience at a clinical facility. Students will gain experience in various medical secretarial, administrative, and clinical and laboratory procedures under the supervision of medical office personnel. Lecture hours will focus on certification preparation.

Total Credits

Total Credit Hours:
6

Billing Hours

Billing Hours Min:
6

Lecture Hours

Lecture Hours (per week):
3

Other Hours

Other Total Hours:
225

Requirements

Prerequisites
MED203 Clinical Procedures II, MED207 Medical Assisting II

Advisement Comments
The student must achieve a “C” (73%) or above in all MED courses in order to enter this course. If a student falls below the “C”, he/she will not be able to progress into the subsequent Medical Assistant courses, until the course is offered again and has been mastered.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Extrapolate learned concepts in all aspects of clinical theory and skills for safe patient outcomes.	1,6	1,3,8,9
Model therapeutic interactions within a diverse healthcare milieu to build professional interrelationships.	3,5	2,4,7
Connect knowledge of administrative technological skills to basic concepts of medical practice finances.	2	2,4
Exemplify a self-motivated pace for the completion of all review modules, practice exams, and remediation in the Medical Assisting Certification Review Course.	4	6

MET101 - Mechanical Print Reading

Overview

Course Description
This course introduces the necessary principles of creating and interpreting mechanical engineering drawings. Topics will include view interpretation, dimensions, sections, aligned views, geometric tolerancing, assembly drawings, along with various symbiology used throughout the industry. Information covered in this course will conform to ANSI National Standards that are used by most manufacturers and engineering departments.This course is required for all students enrolled indrafting and design, mechanical technology, and mechanical engineering technology. This course is also recommended for others who are interested in engineeing or other related fields of study.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Make accurate measurements using a variety of scales.
2. Understand the importance and use of specifications (specs) commonly found on engineering drawings.
3. Identify symbols used on drawings throughout the industry.
4. Interpret assembly drawings and bills of materials.
5. Calculate proper tolerances as needed on mechanical parts.
6. Determine the correct type of "fit" for a given application whether it be a clearance, force, or transitional fit.
7. Identify tolerance values for dimensions on drawings, regardless of the tolerancing expression.
8. Identify and interpret the components of surface texture symbols.
9. Define terms and symbols related to GD & T.
10. Explain the purpose and function of datums.

MET104 - Manufacturing

Overview

Course Description
Presents topics which investigate the materials of industry and the processes used to transform them into finished products. Emphasis is placed on the changing role in manufacturing with regards to new engineered materials and the processing of these materials with high tech, computer controlled equipment.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Explain how raw materials are transformed into standard stock materials.
2. Select a material based on its properties and how it will be utilized.
3. Identify a material by the standard material code used in industry.
4. Recognize the advantages and disadvantages of using different materials.
5. Evaluate the many factors as they relate to the design and production of a product.
6. Explain the different methods of heat treatment and when they should be used.
7. Determine which manufacturing process or processes could be used to produce a product.

MET106 - Mechanical Drafting

Overview

Course Description

This is the second of two courses in drafting for students who are interested in learning the graphic language of industry. It includes basic informations required for making and reading industrial specifications and drawings.The course is required for students enrolled in Mechanical Technology or Drafting and Design and is recommended for those others who are interested in Industrial Arts Education, Engineering, or for special purposes.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

2

Lab Hours

Lab Hours (per week):

6

Requirements

Prerequisites

MET101 Mechanical Print Reading

Learning Objectives

Learning Objectives

1. read and interpret engineering drawings and prints.
2. use CAD software proficiently.
3. display acceptable drafting techniques.
4. organize and make an engineering detail drawing which would include the appropriate views, dimensions, and information.

5. interpret and understand common standards and symbols used on engineering drawings.
6. understand the various special areas of drafting such as electronic schematics, piping, welding, structural, etc.
7. utilize references such as handbooks, catalogs, and other sources of information in order to determine data which might be needed on a drawing.

MET106L - Mechanical Drafting Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
6

MET111 - Computer Aided Drafting

Overview

Course Description
Prepares students to proficiently operate a C.A.D. workstation to produce working drawings. The AUTOCAD software being used, will be the most current, so that upon graduation the students will be familiar with the standard of industry. Emphasis will be placed on using the software and all its capabilities to efficiently create mechanical and architectural drawings.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
4

Lab Hours

Lab Hours (per week):
2

Requirements

Prerequisites
MET101 Mechanical Print Reading

Advisement Comments
Prerequisite(s): MET 101 or HAC 119

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the methods and procedures used in Computer-Aided Drafting.		
Describe the AUTOCAD screen layout and user interface.		
Proficiently use the C.A.D. workstation to create working drawings with greater speed, accuracy, and consistency for a professional looking drawing.		
Plan out a drawing screen using wizards and templates.		
Create drawings using all 2 D commands included in latest version of AUTOCAD.		
Operate plotters and printers through AUTOCAD to produce finished drawings.		
Create presentations using slide show techniques.		

MET111L - Computer Aided Drafting Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
2

MET115 - Computer-Aided Manufacturing

Overview

Course Description
This course will investigate state-of-the-art manufacturing methods presently found in industry. Major emphasis will be placed on the study of development of C.N.C. programming techniques. Additional topics covered are robotics, flexible manufacturing systems, and cells.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1

Learning Objectives

Learning Objectives

1. Develop an understanding of computer-aided manufacturing.
2. Develop a C.N.C. program using machine language.
3. Develop a machining sequence of operations for different workpieces.
4. Develop a hands-on experience using a C.N.C. lathe.
5. Demonstrate the use of robotics and their place in industry.
6. Explain current methods of manufacturing, such as F.M.S., cells, and material handling and storage equipment.

MET115L - Computer-Aided Manuf Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1

MTD200 - Introduction to Mechanicsm

Overview

Course Description
This course involves the study of basic mechanical motion and components such as gears, cams, couplings, springs, and clutches.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
2

Requirements

Prerequisites
MAT130 Industrial Mathematics

MTD200L - Introduction to Mechanisms Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
4

MTD201 - Basic Mechanisms

Overview

Course Description
The various machine components such as gears, cams, couplings, springs, clutches, etc are studied. This study determines the transmission capabilities of the machine parts relative to speeds, forces and power.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
6

Requirements

Prerequisites
MET101 Mechanical Print Reading, MET106 Mechanical Drafting, MAT130 Industrial Mathematics

Learning Objectives

Learning Objectives
A. apply the various basic machine components to a specific purpose.

B. recognize the advantages and disadvantages of the different mechanical components in relation to being used in a mechanism or machine.

C. determine by calculation the various operational values related to the machine components such as force, speed, power, etc.

D. work from handbooks, catalogs, and other informational sources in order to obtain the data necessary for selecting a machine component.

E. make the necessary detail drawings which would be used to make or order the machine component.

F. organize and write a technical report indicating the data which was determined for the selection of a machine component.

MTD201L - Basic Mechanisms Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
6

MTD206 - Machine Design

Overview

Course Description
The student has the opportunity to apply his/her knowledge and creative talents of mechanical components to the design of a machine capable of operating in a prescribed manner.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
6

Requirements

Prerequisites
MTD201 Basic Mechanisms

Learning Objectives

Learning Objectives

A. Investigate, collect, analyze, and organize all necessary data which would be pertinent to the design.

B. Utilize all the disciplines (statics, strength of materials, basic mechanisms, fluid power, math, physics, etc.) where deemed appropriate to the design.

C. Make suitable drawings and bills of material of the design.

D. Write a technical report explaining the complete design project from concept to completion.

E. Use creative thinking and good judgment when considering all the factors involved in the evolution of the design.

F. Utilize available reference materials such as commercial industrial catalogs, handbooks, textbooks, periodicals, etc., in the development of the design.

G. Develop a self-discipline as it relates to the optimum use of whatever time is provided for the completion of the design.

H. Consider the design of the product or machine in relation to its affect it will have on society in general.

I. Design component parts as 3D models.

MTD206L - Machine Design Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
6

MTD208 - Tool Design

Overview

Course Description
Study of procedures used to design cutting tools, gauges, simple jigs, fixtures and dies, and the application of these parts to production methods. Emphasis will be placed on the design and development of tooling currently used for C. N. C. equipment. Computer generated designs using tooling software is an integral part of this course.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
6

Requirements

Prerequisites
MET106 Mechanical Drafting

Learning Objectives

Learning Objectives
1. Analyze a part of terms of the operations, tools, and equipment needed to have it manufactured.

2. Utilize available standard and commercial components and procedures in evolving a tool.

3. Design basic cutting tools, jigs, fixtures, and dies.

4. Investigate, collect, and organize all necessary data which would be pertinent to the design.

5. Make suitable drawings including bill of materials.

6. Use creative thinking and good judgment when considering all factors involved in the evolution of the design.

MTD208L - Tool Design Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
6

MTD210 - Design for Manufacturability

Overview

Course Description
This course involves the investigation and study of the concepts involved in designing a product for efficient manufacturability. Course material will be based upon current engineering design and manufacturing techniques utilized in industry. The importance of effective designs with improved time-to-market skills are stressed as essential components in today's competitive global market.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
MET101 Mechanical Print Reading

Learning Objectives

Learning Objectives
1. Explain the importance of integrating manufacturing capabilities into the design process.

2. Demonstrate the ability to develop and organize an effective small group involvement team.

3. Demonstrate problem-solving skills.

4. Understand the role computers play in manufacturing environments.

5. Incorporate quality orientation designs into products.

6. Demonstrate the skills necessary to analyze component parts for grouping.

7. Evaluate a product from both a design and manufacturing point of view, and demonstrate the opportunities for continuous improvement.

8. Establish a customer-oriented plan before beginning any design/manufacturing process.

MUS101 - Introduction to Music

Overview

Course Description
A course which surveys music as broad whole including classical music, popular music, and music of other cultures. The course also explores the various uses of music in daily life. Designed to develop perceptive listening through the study of the basic elements of musical properties, forms, applications, and styles.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
Designed to develop perceptive listening through the study of the basic elements of musical properties, forms, applications, and styles.

By the end of the course, the student should demonstrate the following competencies:

1.) The ability to appreciate the music of various composers, styles, and periods.

2.) The ability to identify a number of significant works of music by title, composer, and stylistic period.

3.) The ability to understand the forces that have shaped the music of various periods.

4.) The ability to understand the historical development of our musical heritage.

5.) The ability to understand and use a variety of new terms (and/or new meanings of familiar terms).

6.) The ability to recognize various musical concepts, styles, and conventions as they appear in the world

7.) The ability to recognize how music can influence beliefs and behaviors through religious celebration, patriotic music, movie and television soundtracks, and commercials.

MUS105 - Music After Mozart

Overview

Course Description
This is an advanced course dealing with the forms and history of music since the time of W. A. Mozart (1756-1791). Subject material includes the late Classical period, Romanticism, Nationalism, and Impressionism as well as Jazz, Primitivism, Neo-Classicism, folk and popular music of America and music of non-Western cultures. Recorded music will be used in class, and students will be expected to experience live musical performance as part of the academic experience.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MUS101 Introduction to Music

Learning Objectives

Learning Objectives
1. Listened widely and systematically to a large body of music composed and performed since the time of Mozart.
2. Become aware of the forces that shaped that music.
3. Acquired an understanding of the historical development of our musical heritage into the present.
4. Refined an already existing musical vocabulary with which to express informed aesthetic judgment regarding music.
5. Learned to identify a number of significant works of music by title, composer and style period.
6. Developed a greater awareness and appreciation of music in daily life.

MUS107 - American Popular Music

Overview

Course Description
This is a course dealing with the forms and history of American popular music from its 19th century origins to the present. Subject material includes early song forms, folk music, the Blues, Ragtime, early Jazz, Big Band music, Bebop, Rhythm and Blues, Country and Western, Rock 'n Roll (early phases as well as recent trends), and Musical Theater. Recorded musical examples will be used. Students will be expected to attend at least one performance outside of class and to present a report on an assigned topic in class.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Listened widely and systematically to a large body of American popular music.
2. Become aware of the forces that shaped that music.
3. Acquired an understanding of the historical development of American musical culture into the present.
4. Refined a musical vocabulary with which to express informed aesthetic judgment regarding American music.
5. Learned to identify a number of significant performances of American music in cultural and stylistic context.
6. Increased his/her awareness of American music in daily experience.

MUS110 - Functional Music Theory

Overview

Course Description

The course seeks to develop functional skills which enables the student to be able 1.) to recognize and understand the components and structure of music upon hearing. 2.)recognize the key elements in the music which make it successful, 3.)apply new theoretical skills to improve a piece of music or alter its style, 4.)and use new theoretical skills to create specific musical (and emotive) effects within short creative exercises. While the course is intended to develop proficiency for the sound engineer, the skills acquired are also directly applicable for composers and improvisers.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

MUS101 Introduction to Music

Advisement Comments

If MUS 101 prerequisite is not met, functional music reading skills can be assessed through an audition or interview for faculty approval.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Classify fundamental features of song structure and diagram the important structural components of modern music.	3	1
Produce different styles of music using musical materials characteristic of each style.	3	1
Create musical effects and moods using advanced harmonies.	3	1
Use common musical devices such as sequence and ostinato.		

MUS111 - Choral Ensemble

Overview

Course Description

Students study and perform choral music from a variety of styles and historical periods. Vocal techniques, music reading skills and choral elements such as blend, intonation and diction are developed. No previous musical training is required. Students will be expected to do some out-of-class preparation between rehearsals. Public performance is required.

Total Credits

Total Credit Hours:

1

Billing Hours ⓘ

Billing Hours Min:

1

Lab Hours

Lab Hours (per week):

3

Learning Objectives

Learning Objectives

1. Perform a repertoire of music from various historical periods and cultural styles.
2. Examine specific musical works as linked to the cultural, social and historical conditions in which they were created.
3. Develop a variety of vocal performance techniques which increase the student's understanding, preparation and enjoyment of live performance.
4. Experience expressive group singing through the performance of quality music.
5. Demonstrate vocal techniques such as proper breathing, fundamental tone production, phrasing and articulation and apply these on an individual level to their own singing.
6. Demonstrate an increased awareness and openness in daily experiences with music.

MUS190 - Voice Ensemble

Overview

Course Description

Voices of Inclusion Choral Ensemble (VOICE) is a non-auditioned vocal ensemble that rehearses and performs at Cedar Crest College. This course is taught on Cedar Crest College's campus by their faculty. This 3 credit course was designed to help VOICE members experience a unique and positive atmosphere in which they can learn to be a better performer as well as achieve greater vocal independence and confidence. Participation in VOICE is open to all Cedar Crest College and Lehigh Carbon Community College students as well as alumni and member of the community.Voice members study and rehearse a variety of musical styles and work as an ensemble to perform and share music with the community. Enthusiastic participation, effective rehearsals, and a strong commitment to practice help VOICE members prepare for at least one concert per semester in addition to other performance opportunities that may arise at the college and throughout the local community.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Advisement Comments
This course is taught on Cedar Crest College's campus by their faculty. The student will need to provide their own transportation to/from Cedar Crest's campus for rehearsals and concerts.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Develop and demonstrate healthy vocal techniques such as good posture, breath control, tone placement, and diction	n/a
2. Demonstrate appropriate interpretation/expression of the selected music	n/a
3. Develop and use a knowledge of music skills and vocabulary	n/a
4. Develop and improve the skills/techniques needed for singing independently and cooperatively in a choral ensemble	4. Participate cooperatively within a team
5. Develop an understanding and appreciation of various music styles/genres	n/a
6. Develop competency in both presenting concerts and being constructively critical and self-evaluative about the ensemble's and their individual performance	2. Communicate effectively

MUS297 - Special Topics

Overview

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

NET109 - Orientation to IT Professionals

Overview

Course Description
This course provides guidance on exploring the professional opportunities in the Information Technology workforce. The class provides a self-exploration of the careers currently available in the IT workforce. Participants will learn how and where to gather data associated with currently advertised jobs. Each student will complete an extensive job search, perform and analyze their findings and present the employment knowledge, skills and abilities required of each job posting. Participants will also be asked to identify associated professional certifications, professional associations, current issues, and salaries. The course includes a self-assessment survey and creation of a custom study plan for each participant.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
This is similar to an FYE course. It explores certifications and employment.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
Identify the major professions in the IT field.	Identify and qualify to apply for positions as entry-level network technicians
Identify the major knowledge, skills, and abilities (KSA) associated with specific IT professions.	
Align employment KSAs to specific classes in the career pathway.	
Identify major IT professional organizations.	
Design a custom study plan to meet career goals.	

NET110 - CompTIA Network Essentials

Overview

Course Description
This course first introduces the fundamental building blocks that form a modern network, such as protocols, media, topologies, and hardware. Topics such as TCP/IP, Ethernet, wireless transmission, virtual networks, security, and troubleshooting will be introduced. You will be prepared to select the best network design, hardware, and software for your environment. You will also have the skills to build a network from scratch and maintain, upgrade, troubleshoot, and manage an existing network. Finally, you will be well-prepared to pass Comp TIA's Network +N10-007 certification exam.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

NET110L - CompTIA Network Essentials Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET111 - CompTIA A+ Core 1

Overview

Course Description
This course will help you prepare for the CompTIA A+ Core I exam and be prepared to enter the IT field. This course covers mobile devices, network technology, hardware, virtualization and cloud computing and network troubleshooting. CompTIA A+ is the industry standard for launching IT careers. Unlike a bootcamp approach this course focuses on the acquisition of hands on skills.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identifying, using, and connecting hardware components and devices	1	5
Given a scenario, install and configure laptop hardware and components.	1	5
Given a scenario, install and configure a basic wired/wireless SOHO network	1,2	5

NET111L - CompTIA A+ Core 1 Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET113 - A+ Technical Support

Overview

Course Description
A+ IT Technical support is for the student who has basic knowledge and experience with PCs and who wants to pursue a career as a computer technician, system engineer or network administrator. A+ establishes best practices in troubleshooting, networking and security across a variety of devices to set the stage for IT careers. The certification also matches professional tech skills with communication skills. This course complies with the guidelines set by CompTIA for the A+ certification. With appropriate study a student can pass the certification exam.

Total Credits

Total Credit Hours:
6

Billing Hours ⓘ

Billing Hours Min:
6

Lecture Hours

Lecture Hours (per week):
6

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Assemble components to create a PC	Use current technology effectively
2. Students will be able to install different devices	Use current technology effectively
3. Understand the basics of networking and security.	Use current technology effectively
4. Safely diagnose and resolve common hardware issue	Use current technology effectively
5. Understand the basics of virtualization	Use current technology effectively
6. Able to install a Windows Operating system and configure it according to their needs	Use current technology effectively

NET121 - CompTIA A+ Core 2

Overview

Course Description
Students will gain a complete, step-by-step approach for learning the fundamentals of supporting, securing, and troubleshooting operating systems. This course maps fully to CompTIA's latest A+ 220-1002 (Core 2) Exam objectives. This course has a heavy emphasis on hands on skills acquisition.

Total Credits

Total Credit Hours:
3.5

Billing Hours ⓘ

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
NET111 CompTIA A+ Core 1

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Install, configure and maintain desktop operating systems	1	5
Given a scenario, configure security on SOHO wireless and wired networks	1,2	5
Given a scenario, troubleshoot common wired and wireless network problems	1,2	5

NET121L - A+ Practical Application Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
1.5

NET136 - Installation, Storage and Compute With Windows Server 2016

Overview

Course Description
This course focuses primarily on the installation, storage, and compute features and functionality available in Windows Server 2016. It covers general installation tasks and considerations and the installation and configuration of Nano Server, in addition to the creation and management of images for deployment. It also covers local and server storage solutions, including configuration of disks and volumes, Data Deduplication, High Availability, Disaster Recovery, Storage Spaces Direct, and Failover Clustering solutions. The exam also covers Hyper-V and containers, along with the maintenance and monitoring of servers in physical and compute environments. The material covered on the MIcrosoft exam 70-740 is covered.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Requirements

Prerequisites
NET113 A+ Technical Support

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Install Windows Servers in host and compute environments	Install and Administer 2016 Servers
2. Implement Storage Solutions	Install and Administer 2016 Servers
3. Implement HyperV	Install and Administer 2016 Servers
4. Implement Windows Containers	Install and Administer 2016 Servers
5. Implement High Availability	Install and Administer 2016 Servers
6. Maintain and monitor server environments	Install and Administer 2016 Servers

NET136L - Windows Server 2016 Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

NET151 - Msft Azure - Modern Desktops

Overview

Course Description
This course in server installation and configuration is designed to help students in preparation for Microsoft Related Azure Certifications such as the MD-101:Managing Modern Desktops Exam. The successful student will be exposed to elements such as appropriate deployment options, upgrading computers to Windows 10, Windows Updates, User Profiles, Folder Redirection, and configuration of Windows Defender. In addition, the student will be exposed to theoretical implementations of Cloud technologies hosted on server operating systems.

Total Credits
Total Credit Hours:
3.5

Billing Hours
Billing Hours Min:
3.5

Lecture Hours
Lecture Hours (per week):
3

Lab Hours
Lab Hours (per week):
1.5

Requirements
Prerequisites
NET121 CompTIA A+ Core 2

Learning Objectives
Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe, compare and contrast multiple certifications advantageous for various roles in Windows Technology, Cloud Technology and networking.	2, 6	5
Evaluate deployment options for Windows Client options and Cloud technology implementation in business enterprises.	2, 6	5
Implement Installation of Windows 10 and greater on physical and virtual computers.	2, 6	5
Create users, profiles and configure document protection schemes.	2, 6	5
Implement client and network protection methods such as firewalls and antivirus applications.	2, 6	5

NET161 - Scripting for Security

Overview
Course Description
This module focuses on basic scripting using Python. It focuses on the basic constructs and useful commands such as conditional, looping, and logical constructs as well as variables and user and system interfaces. Students create basic scripts and have a foundation upon which to learn more advanced Python scripting. One of the exercises is to implement a simple file system scanner, so the students will practice scripting security applications and administrative scripts by invoking Linux commands through Python. Additional cyber security scripting will be explored.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements

Prerequisites
NET121 CompTIA A+ Core 2

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate their proficiency in the use of scripting languages to write simple scripts (e.g., to automate system administration tasks).	7	5
Write simple linear and looping scripts	7	5
Write simple and compound conditions within a programming language or similar environment (e.g., scripts, macros, SQL).	7	5
Demonstrate proficiency in the use of a programming language to solve complex problems in a secure and robust manner.	7	5

NET171 - Msft Azure Administrator

Overview

Course Description
This course will help you prepare for Microsoft Exam AZ-104 exam. You will learn and demonstrate your real-world mastery of implementing and deploying Microsoft Azure Infrastructure as a Service (IaaS). This is part of the Microsoft role based Associate path designed for those wishing to enter the workforce in network administration; implementing, managing, and monitoring your company's cloud environments and solutions.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Requirements

Prerequisites
NET110 CompTIA Network Essentials

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Manage Azure identities and governance	3,5	5
Implement and manage cloud storage	3,5	5
Configure and manage virtual networking	3,5	5
Monitor and back up Azure resources		

NET171L - Msft Azure Administrator Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET210 - Linux Installation & Admin

Overview

Course Description
This course will provide the student with a comprehensive overview of the Linux operating system. By the end of the course, the student will not only be familiar with the Linux command-line environment, utilities, and applications, but with the graphical X Window environment. Additionally, this course will provide a solid foundation for those students wishing to take the CompTIA Linux Plus exam, as well as the skills for day-to-day Linux Administration.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

- Install Linux
- Identify the components of the Linux file system
- Manage Linux files and set permissions
    - Describe the BASH shell
    - Identify the processes necessary to complete the boot process

- Configure X windows
- Perform common administrative tasks
- Configure compression and system backups

NET210L - Linux Installation & Admin Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET220 - Intro to Networks

Overview

Course Description
Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing scheme.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Requirements

Prerequisites
CIS105 Intro to Comp & Applications

Learning Objectives

Learning Objectives
· Describe the devices and services used to support communications in data networks and the Internet

· Describe the role of protocol layers in data networks

· Describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments

- Design, calculate, and apply subnet masks and addresses to fulfill given requirement in networks
- Build a simple Ethernet network using routers and switches
- Use Cisco command – line interface (CLI) commands to perform basic router and switch configurations

NET220L - Intro to Networks Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET225 - Routing & Switching Essentials

Overview

Course Description
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives
- Describe enhanced switching technologies such as VLANs, VLAN Trunking Protocol, Rapid Spanning Tree Protocol, and 802.1q
- Describe basic switching concepts and the operation of Cisco switches
- Configure and troubleshoot basic operations of a small switched network
- Configure and troubleshoot basic operations of routers in a small routed network
- Configure and troubleshoot VLANs and inter-VLAN Routing
- Describe the operations of Dynamic Host Configuration Protocol and Domain Name System for IPv4 and IPv6

NET225L - Routing& Switch Essentials Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET230 - CCNA 3-Scaling Networks

Overview

Course Description
This course describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

- Configure and troubleshoot DHCP and DNS operations for IPv4 and IPv6
- Understand and describe the operations and benefits of the Spanning Tree Protocol (STP)
- Configure and troubleshoot STP operations
- Understand and describe the operations and benefits of link aggregation and Cisco VLAN Trunk Protocol (VTP)
- Configure and troubleshoot VTP, STP, and RSTP
- Configure and troubleshoot basic operations of routers in a complex routed network for IPv4 and IPv6
- Configure and troubleshoot advanced operations of routers and implement RIP, OSPF, and EIGRP routing protocols for IPv4 and IPv6
- Manage Cisco IOS® Software licensing and configuration files

NET230L - CCNA-3 Scaling Networks Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1.5

NET235 - CCNA 4-Connecting Networks

Overview
Course Description
This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network.

Total Credits
Total Credit Hours:
3.5

Billing Hours
Billing Hours Min:
3.5

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives
- Understand and describe different WAN technologies and their benefits
- Understand and describe the operations and benefits of virtual private networks (VPNs) and tunneling
- Configure and troubleshoot serial connections
- Configure and troubleshoot broadband connections
- Configure and troubleshoot IPSec tunneling operations
- Monitor and troubleshoot network operations using syslog, SNMP, and NetFlow
- Design network architectures for borderless networks, data centers, and collaboration

NET235L - CCNA 4-Connecting Networks Lab

Overview
Total Credits
Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET236 - Networking with Windows Server 2016

Overview

Course Description
This course focuses on the networking features and functionality available in Windows Server 2016. It covers DNS, DHCP, and IPAM implementations, in addition to remote access solutions, such as VPN and Direct Access. It also covers DFS and BranchCache solutions, high performance network features and functionality, and implementation of software-defined networking (SDN) solutions, such as Hyper-V Network Virtualization (HNV) and Network Controller. Material on the Microsoft 70-741 exam is covered.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Implement Domain Name Services DNS	Install and administer Windows 2016 servers
2. Implement DHCP and IPAM	Install and administer Windows 2016 servers
3. Implement Network Connectivity and Remote Access solutions	Install and administer Windows 2016 servers
4. Implement IPV4 and IPV6 addressing	Configure network connectivity in IPV4 and IPV6
5. Install and configure DFS	Install and administer Windows 2016 servers

NET236L - Windows Server 2016 Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET237 - Identity with Microsoft Server 2016

Overview

Course Description
This course focuses on the identity functionality in Windows Server 2016. It covers the installation and configuration of Active Directory Domain Services (AD DS), in addition to Group Policy implementation for non-Nano Server environments. It also covers functionality such as Active Directory Certificate Services (AD CS), Active Directory Federations Services (AD FS), and Web Application proxy implementations. With appropriate study as student can take the Microsoft exam 70-742.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Install and configure active directory domains	Install and administer Windows 2016 servers
2. Manage and maintain AD DS	Install and administer Windows 2016 servers
3. Create and manage group policy	Install and administer Windows 2016 servers
4. Implement Active Directory Certificate services	Install and administer Windows 2016 Servers Apply Cyber defense methods to prepare a system to repel attacks
5. Implement Active Directory Federation and Access Solutions	Install and administer Windows 2016 servers

NET237L - Identity Microsoft Server Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
1.2

NET240 - Implementing Cisco Technology

Overview

Course Description
This course in networking and data communications is designed to help students in preparation for the CompTIA Network+ as well as Cisco's CCNA certification exam. The successful student will explain different IP Classes, the OSI Model, network topologies, protocols and selected network devises such as bridges, routers, switches, etc. Discussions concerning network technician tools will also be explored. In addition, the student will be exposed to theoretical implementations of network technologies hosted on server operating systems. The course is a prerequisite for most other networking courses at the College.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Requirements

Prerequisites
NET110 CompTIA Network Essentials

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain concepts and manipulate primary network communication concepts, typologies and practices.	4,5	5
Explain, manipulate and utilize security methods and practices pertaining to WAN corporate level network devices.	4,5	5
Categorize, explain and utilize network media the connection types.	4,5	5
Categorize, explain and utilize methods required in logical subdivision of networks and configuration of communication identities of network devices.	4,5	5
Explain and utilize multiple network management and troubleshooting methods.	4,5	5

NET240L - Implementing Cisco Tech Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

NET241 - Administering Cisco Tech

Overview

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Requirements

Prerequisites
NET240 Implementing Cisco Technology

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate an understanding of Cisco Security concepts.	3,4,5	5
Demonstrate the ability to segment and design WAN infrastructures.	4,5	5
Demonstrate the ability to support multiple network functions and features.	4,5	5
Demonstrate the ability to implement security and communications.	4,5	5
Display understanding of knowledge and skills necessary in Cisco technology functions.	4,5	5

NET241L - Administering Cisco Tech Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1.5

NET242 - Advanced Cisco Technologies

Overview

Total Credits
Total Credit Hours:
3.5

Billing Hours
Billing Hours Min:
3.5

Lecture Hours
Lecture Hours (per week):
3

Lab Hours
Lab Hours (per week):
1.5

Requirements
Prerequisites
NET241 Administering Cisco Tech

Learning Objectives
Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate an understanding of Advanced Cisco Security concepts.	3,4,5	5
Subnet and design WAN infrastructures.	4,5	5
Support encrypted remote communication between network devices.	4,5	5
Implement enterprise-level network methods.	4,5	5
Display advanced competency and expertise in CCNA topics and configuration tasks.	4,5	5

NET242L - Advanced Cisco Tech Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
1.5

NET265 - Capstone for IT Professionals

Overview
Course Description
This course is designed to be taken in the last semester at LCCC. Students will develop a resume that correctly reflects their learning at LCCC. Student learn how to identify jobs fro which they are qualified. They will explore interview skills and how to land that first job. Additionally, students interested in transfer will explore options and review the transfer process.

Total Credits
Total Credit Hours:
1

Billing Hours
Billing Hours Min:
1

Lecture Hours
Lecture Hours (per week):
1

NET280 - Network Technology Internship

Overview
Course Description
The student will work in a supervised internship in the community. The work assignment is selected according to the student's career goals. Students should apply for this learning experience through the appropriate faculty member at least six weeks prior to the end of the semester proceeding the work period.

Total Credits
Total Credit Hours:
2

Billing Hours
Billing Hours Min:
2

Other Hours
Other Total Hours:
10

Learning Objectives
Learning Objectives
- Complete a work related status report

- Apply classroom knowledge in the work environment

NET297C - Cloud Essentials

Overview

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives
1) Cloud Architecture and design

2) Cloud security

3) Cloud deployment

4) Operations and support in the

cloud

5) Troubleshooting cloud issues

NET297L - Special Topics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
0

NUR106 - Nursing I

Overview

Course Description
Introduction to the profession of nursing with an emphasis upon the nursing process, teaching-learning concepts, and the expectations and responsibilities of the Practical Nurse. Students study the basic human needs of individuals and the effects of illness upon the adult patient, the family and the community. Basic nursing skills are developed that enable students to care for individuals, families and communities. Evidence-based concepts of nutrition, therapeutic communication, asepsis, and care of the operative patient concepts are presented within the course. Ethical, legal, cultural, and spiritual responsibilities of nursing care are introduced. Nursing concepts are reinforced and applied through clinical laboratory experience in selected health care facilities and/or community agencies.

Total Credits

Total Credit Hours:
11

Billing Hours

Billing Hours Min:
11

Lecture Hours

Lecture Hours (per week):
7

Other Hours

Other Total Hours:
255

Requirements

Prerequisites
SDS112 Intro to Practical Nursing

Advisement Comments
Enrollment in any NUR course restricted to Practical Nursing Program students.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARD	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
1. Develop an awareness of the relationship between humans, nursing, health and the environment.	2, 3	1, 6	1, 8
2. Provide a safe therapeutic environment which will foster the physical, spiritual, cultural, psychological and social health of the client.	3	2, 6	7, 8
3. Perform safe, basic nursing care based on knowledge of scientific principles.	2, 3	3, 6	3, 5, 8
4. Identify basic therapeutic communication skills.	2, 3	4	2, 4
5. The student will use the nursing process to critically think and deliver evidence-based basic nursing care.	1,2	5, 6	1, 8
6. Identify the legal and ethical responsibilities of the Practical Nurse.	1, 2, 3, 4, 5, 6	6, 7	9
7. The student will implement the basic role of the Practical Nurse as a contributing member of the health team fostering effective relationships between the client, family, and members of the health care team.	1, 2, 3, 4, 5, 6	6, 8	4, 5
8. The student will introduce the principles of the teaching-learning process to promote, maintain and/or restore health of individuals.	2,5	6, 9	1, 2

NUR106K - Nursing I Clinical

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
17

NUR106L - Nursing I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

NUR116 - Nursing II

Overview

Course Description
Students study the nursing care required by patients with acute and chronic medical-surgical conditions across the lifespan. Use of therapeutic communication skills and the nursing process offer a foundation for the implementation of nursing care provided for individuals, families and groups. Study of basic principles of pharmacology provides a foundation for subsequent administration of drug therapy. Ethical, legal, cultural and spiritual aspects of nursing care are reinforced. The teaching- learning process in the role of Practical Nurse is further explored. Application of evidence-based nursing concepts is achieved through clinical laboratory experience in selected health care facilities and/or community agencies.

Total Credits

Total Credit Hours:
11

Billing Hours

Billing Hours Min:
11

Lecture Hours

Lecture Hours (per week):
7

Other Hours

Other Total Hours:
255

Requirements

Prerequisites
NUR106 Nursing I

Corequisites
BIO164 Anatomy & Physiology II, PSY145 Human Growth & Development

Advisement Comments
Enrollment in any NUR course restricted to Practical Nursing Program students.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARD	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
1. Discuss the relationship between humans, nursing, health, and the environment.	2,3	1,6	1,8
2. Implement safe, appropriate nursing behaviors to meet the physical, spiritual, cultural, psychological, and social needs of the client.	3	2,6	7,8
3. Apply related sciences in the safe performance of nursing skills to meet the needs of assigned patients.	2,3	3,6	3,5,8
4. Develop effective communication skills by using appropriate terminology with clients, families, and health-care providers.	2,3	4	2,4
5. Use the nursing process and evidence-based knowledge to critically think and meet the needs of the client experiencing acute and chronic medical-surgical conditions.	1,2	5,6	1,8
6. Discuss a standard of legal and ethical accountability.	1,2,3,4,5,6	6,7	9
7. Recognize the role of the Practical Nurse in the evolving health care delivery system.	1,2,3,4,5,6	6,8	4,5
8. Use the teaching-learning process to implement a teaching plan, to promote, maintain, and/or restore health for a specific client, family, or group.	2,5	6,9	1,2

NUR116K - Nursing II Clinical

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
18.25

NUR116L - Nursing II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

NUR126 - Nursing III

Overview

Course Description
Students explore the nursing concepts pertinent to the birth process. Use of the nursing process in caring for patients with more complex acute and chronic medical-surgical conditions across the lifespan is continued. Principles of pharmacology and medication administration are integrated throughout the course. Psychosocial adaption of individuals, families, and groups is emphasized. Ethical, legal, cultural and spiritual aspects continue to be part of nursing care. The teaching-learning process continues to be demonstrated. Students focus on the leadership and role responsibilities of the Practical Nurse as a contributing member of the health care team. Application of therapeutic communication skills and the nursing process is achieved through clinical laboratory experiences in a general hospital and in selected community agencies.

Total Credits

Total Credit Hours:
14

Billing Hours

Billing Hours Min:
14

Lecture Hours

Lecture Hours (per week):
10.5

Other Hours

Other Total Hours:
255

Requirements

Prerequisites
NUR116 Nursing II

Corequisites
SOC150 Introduction to Sociology

Advisement Comments
Enrollment in any NUR course restricted to Practical Nursing Program students.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	ACEN STANDARD	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
1. Analyze the relationship between the concepts of humans, nursing, health and the environment.	2,3	1,6	1,8
2. Demonstrate the ability to safely modify nursing actions based on physical, spiritual, cultural, psychological, and social changes in the care of clients.	3	2,6	7,8
3. Perform more complex therapeutic nursing skills in the care of acute and chronically ill clients across the lifespan.	2,3	3,6	3,5,8
4. Demonstrate communication abilities needed to maintain therapeutic relationships with individuals, families and groups.	2,3	4	2,4
5. Use the components of the nursing process and evidence-based knowledge to critically think and prioritize care of the client from conception through the lifespan.	1,2	5,6	1,8
6. Practice ethical and legal principles while interacting with staff, individuals, families or groups.	1,2,3,4,5,6	6,7	9
7. Understand the role of the Practical Nurse as it relates to: - utilizing educational opportunities for professional development; - recognizing self-potential related to career mobility; - delegating of responsibilities; - using political action to effect change in the health care delivery system.	1,2,3,4,5,6	6,8	4,5
8. Develop a variety of teaching-learning strategies to promote, maintain and/or restore the health of clients across the lifespan.	1,2,3,4,5,6	9	1,2

NUR126K - Nursing III Clinical

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
18

OTA101 - Intro to Occupational Therapy

Overview

Course Description
This course provides an introduction to occupational therapy programs in a variety of settings. Ethical and legal responsibilities, therapeutic relationships, licensure and certification requirements are discussed. Fieldwork Level I (FWE I) is included. Students observe patients in therapy and report on observations.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

OTA103 - Therapeutic Media

Overview

Course Description
An introduction to Occupational Therapy interventions utilizing a variety of crafts and activities, for a diverse client population, are explored. Activities are analyzed for their therapeutic effect on individuals while considering physical, psychosocial and contextual issues. Minor crafts, leather, metalwork, graphic arts, stitchery, and orientation projects are explored. FWE I is included.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
1.5

OTA110 - Intervention in Occupa Therapy

Overview

Course Description
An emphasis on therapeutic use of self, group skills, task skills, and activity analysis focusing on occupation will be explored. Intervention utilizing ceramics, woodworking, music activities, horticulture, and adaptation of sports are also covered. A review of the role/responsibilities of an activities director and OT services in the community is discussed. FWE I is included.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
2

OTA110K - Intervention in Occupa Therapy

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Other Hours

Other Total Hours:
1.5

OTA116 - Treat in Adult/Ger Rehab

Overview

Course Description
Etiology, characteristics, precautions of selected physical and psycho-social dysfunctions are studied as they relate to adult and geriatric patient. Occupational therapy evaluations, treatment approaches, and assistive devices are explored. Treatment options for ADLS, work simplification, home management, functional mobility,and preventative care are analyzed and practiced and assistive devices are analyzed in relation to specific limitations and disabilites. FWE I is included.

Total Credits

Total Credit Hours:
3.5

Billing Hours

Billing Hours Min:
3.5

Lecture Hours

Lecture Hours (per week):
2

OTA211 - Occ Therapy in Mental Hlth

Overview

Course Description
Current theories and practices of occupational therapy in mental health for adolescents, adults, and geriatrics are explored. Individual needs, group structures, group relationships and problem-solving processes are discussed. Demonstration of group planning, treatment implemenation, and leadership skills for various diagnoses and community treatment facilities are practiced and evaluated. Specific diagnoses are presented. Treatment of hypothetical cases are planned and implemented as well as writing goals and progress notes. Fieldwork Level I is included.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

OTA217 - Treat in Adult/Ped Rehab

Overview

Course Description
Current theories and practice of occupational therapy in adult and pediatric treatment are explored including typical and atypical development. Selected pediatric and adult evaluations and treatment techniques are presented and practiced. Fieldwork experience provides opportunities to observe and participate in specific evaluation/ treatment techniques used with a variety of conditions. Documentation and report writing are practiced. FWE I is included.

Total Credits
Total Credit Hours:
4

Billing Hours
Billing Hours Min:
4

Lecture Hours
Lecture Hours (per week):
3

OTA223 - Adap/Tech Occup Therapy

Overview
Course Description
Provides the student with a basic foundation of therapeutic skills and procedures. Techniques and safety in static hand splinting, PROM, dexterity and UE assessments, body mechanics and functional mobility are stressed. The opportunity to practice fabricating a wide variety of adaptive equipment ans switches is included. Additional topics covered are: positioning, work rehabilitation, hand injuries and dysphagia. Visits to selected agenices increase exposure to therapeutic equipment, and alternative healthcare practices.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
2

OTA240 - Fieldwork Experience II

Overview
Course Description
Provides supervised experience with patients in selected facilities. The experience will be varied and may include: physical rehabilitation, mental health, pediatric, hand therapy, work programs, home care and non traditional settings. Two eight week experiences are scheduled and required. Four seminars are held on campus to discuss the fieldwork experience. The student must successfully complete the scheduled fieldwork within the semester. All fieldwork level II must be successfully completed within 18 months of the last academic semester.

Total Credits
Total Credit Hours:
12

Billing Hours
Billing Hours Min:
12

Lecture Hours
Lecture Hours (per week):
1

Other Hours

Other Total Hours:
40

PED110 - Conditioning & Aerobics I

Overview

Course Description
This course is designed to promote total cardiorespiratory and muscular fitness through aerobic and muscular activity. Healthful benefits are attained as each individual student develops at his/her pace. Each participant will acquire knowledge that will enable them to initiate and maintain a lifetime scientifically based exercise and nutrition program.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

PED111 - Conditioning & Aerobics II

Overview

Course Description
This program is designed to promote heightened levels of physical fitness for students that initiated their fitness training in PED 110. Conditioning II is based on overload efforts aerobics, muscular toning, and the physiological basis of activity.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

PED135 - Golf/Volleyball

Overview

Course Description
Students will develop skills in the basic techniques, strategies and concepts that enable them to enjoyably pursue golf and volleyball.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives
1. Demonstrate at least a minimum of skill that will promote enjoyable lifetime participation in golf and/or volleyball.
2. Participate cooperatively within a team.
3. Discuss how participation and training for golf and volleyball promote fitness and potential for stress control.
4. Demonstrate and apply knowledge and understanding of the rules of golf and volleyball to develop a greater appreciation of these lifetime sports as a participant and a spectator.

PED137 - Golf/Bowling

Overview

Course Description
Students will acquire skills and knowledge which will enable them to enjoyably participate in these lifetime recreational activities.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

PED143 - Weight Training & Fitness

Overview

Course Description
Acquaints students with proper technique and safety procedures for fitness development with weight training and aerobic activity. The student will plan, implement and evaluate his/her program.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

PED150 - Adapted Physical Education

Overview

Course Description
This is an individualized student-teacher relationship designed for individuals who have limitations that disallow participation in the standard physical education curriculum. Students desiring this personalized instruction require teacher approval prior to registration and a doctor's statement and disability.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives
This is an individualized program completely dependent upon the particular student's disability. The student's improvement will be based on greater control over their limitations.

PED155 - Volleyball/Softball

Overview

Course Description
The basic skills of volleyball and softball are presented to enable students the opportunity for lifetime recreational enjoyment. Techniques, strategy and rules are covered in the presentation.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives
1. Demonstrate at least a minimal level of skill that will enable him/her to participate enjoyably in the lifetime volleyball/softball.
2. Identify social competencies and an appreciation for others' limits and skills.
3. Demonstrate cardiorespiratory and muscular fitness with stress management a favorable outcome.
4. Demonstrate and apply knowledges and rules of volleyball/softball to develop an appreciation for volleyball and softball as a participant or spectator.

PED160 - Karate/Self-Defense

Overview

Course Description
Basic introduction in the fundamentals of self-defense. Mental discipline and basic philosophies of the martial arts will be incorporated.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lab Hours

Lab Hours (per week):
2

PED165 - Introduction to Yoga

Overview

Course Description
This course is a hatha yoga presentation striving for improved physical fitness, vitality and relaxation through various asanas (postures).

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

PED166 - Intermediate Yoga

Overview

Course Description
This course is concerned with the continued development of skills introduced in PED 165. Review and refinement of beginning level yoga exercises will be emphasized. Additional exercises will be added as students demonstrate proficiency.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lab Hours

Lab Hours (per week):
2

PED180 - Intro to Jiu Jitsu & Grappling

Overview

Course Description
This course is intended to introduce the new student to the martial art of Jiu Jitsu to include survival skill, escapes, the guard, guard passing, and submissions. Student will be able to develop a lifetime appreciation for the art as a martial art, sport, and recreational activity.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
0.5

Lab Hours

Lab Hours (per week):
1.5

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate basic grappling skills from the guard position	#4 Participate cooperatively within a team
2. Demonstrate escape skill from the guard position.	#4 Participate cooperatively within a team
3. Demonstrate basic submissions skills from the mount and guard position.	#4 Participate cooperatively within a team
4. Demonstrate basic tumbling and rolling associated with the sport of jiu jitsu and grappling	#4 Participate cooperatively within a team

PHI201 - Introduction to Philosophy

Overview

Course Description
Introduces basic philosophic concepts and methods. Students will gain an understanding of logic and argument, philosophical schools of thought and how philosophy drives historical trends and everyday decisions. Representative selections from the works of leading philosophers will be analyzed to supplement the examination, comprehension and speculation involved in these areas.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Discuss and demonstrate formal and informal logic.
2. Explain the three major sub fields in philosophy
3. Deconstruct and evaluate important positions and arguments in the major sub fields
4. Formulate positions of one's own in each of the three sub fields

PHI203 - Introductory Logic

Overview

Course Description
Includes the study of language as symbols, the analysis of arguments, emotive and non-emotive language, the proper use of dedution and induction, logical fallacies, syllogisms, Venn diagrams, and truth-tables.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives
1. Recognize arguments and their components including those with missing premises or conclusions (enthymemes) and nested arguments.
2. Present arguments to clarify the overall structure.
3. Appraise inductive arguments and evaluate the strength of inferences drawn.
4. Judge the validity of deductive arguments.
5. Identify informal fallacies.
6. Employ Venn diagrams to test the validity of categorical syllogisms.
7. Interpret truth tables to determine the truth value of compound statements.
8. Use truth tables to determine validity and to test for tautologies, self-contradictions, and equivalences.

PHI205 - Introduction to Ethics

Overview
Course Description
Investigates the theory and practice of ethics and morality. In-depth study of various theoretical perspectives-both Western and Eastern-will precede a study of ethical issues. The issues studied will include those of life and death, equality and discrimination, economic justice and globalization, medical and business ethics, environmental and animal rights, and violence, terrorism and war.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

§ Exemplify an understanding of Ethical theory

§ Demonstrate an understanding of the differences between Eastern and Western Ethical perspectives

§ Analyze the various ethical issues in light of the different theories and perspectives

§ Formulate and evaluate arguments within the moral decision-making process

PHI210 - Comparative Religion

Overview

Course Description

Provides ananalytical and comparative survey of the major living religions of the world: religions of India (proto-Hinduism, Hinduism, Jainism, Buddhism and Sikhism), religions of the Far East (Confucianism, Taoism, East Asian Buddhism and Shinto) and religions of the Middle East (Zoroastrianism, Judaism, Christianity and Islam) with emphasis on their cultus, mythologies and ethical beliefs.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Describe the specific major religions of the world.	
2. Explore the basic teachings or theology which are representative of these religions.	
3. Identify similarities and differences among these religions and the major religions in the United States.	
4. Discuss the state of religion today among the various world religions studied.	

PHY101 - Conceptual Physics

Overview

Course Description

Provides, for the nonscience student, a base from which to view in a more conceptual rather than from primarily a mathematical way and to see that surprisingly few relation- ships make up the rules of nature. For the science student, it can lay the foundation for further students in physics.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
0

PHY101L - Conceptual Physics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

PHY103 - Fundamental of Physics

Overview

Course Description
This course is for allied health students and non-science majors. Basic areas of study are mechanics, properties of materials, heat, waves, and electricity with practical applications to everyday life and the human body. Mathematical techniques are developed as needed, and occasionally computers are used to obtain data.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level, Math Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate knowledge of Newton's Laws of Motion and apply them to simple physical systems using international system of units.	N/A
2. Demonstrate knowledge of the Law of Conservation of Energy and apply it to simple mechanical systems using international system of units.	N/A
3. Demonstrate knowledge of the Laws of Rotational Dynamics and learn how to apply them to simple mechanical systems using international system of units.	N/A
4. Demonstrate knowledge of the concepts and phenomena of wave motion and be able to articulate the principles of superposition, interference, diffraction, and resonance of waves.	
5. Demonstrate knowledge of the concepts and phenomena in the fields of heat and thermodynamics and apply them to simple mechanical system using international system of units.	N/A
6. Demonstrate the understanding of fundamental concepts of electricity. Apply Ohm's Law to analyze series and parallel circuit in terms of current and potential difference.	N/A
7. Demonstrate good experimental techniques including making observations and measurements, constructing a hypothesis and designing an experiment to test it, analyzing and interpreting experimental results using various word processing/ spreadsheet applications.	#8: Apply scientific reasoning

PHY103L - Fundamentals of Physics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

PHY110 - Elements of Physics

Overview

Course Description
Primarily for technical students requiring one semester of physics and for students to meet a general science require- ment, this course provides the student with basic concepts of physics. Major areas of study are mechanics, properties of matter, and heat, with selected topics on waves and electricity and magnetism. Applications to everyday life, the automobile, aircraft, chemical technology, and/or heating and air conditioning are cited. Computers are frequently used in lab for data acquisition and analysis.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Upper Level

Advisement Comments
Prerequisite(s): Upper-Level Math Placement or
MAT 105 (C or better)

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate knowledge of Newton's Laws of Motion and apply them to simple physical systems using international system of units.	N/A
2. Demonstrate knowledge of the Law of Conservation of Energy and apply it to simple mechanical systems using international system of units.	N/A
3. Demonstrate knowledge of the Laws of Rotational Dynamics and learn how to apply them to simple mechanical systems using international system of units.	N/A
4. Demonstrate knowledge of the concepts and phenomena of wave motion and be able to articulate the principles of superposition, interference, diffraction, and resonance of waves.	
5. Demonstrate knowledge of the concepts and phenomena in the fields of heat and thermodynamics and apply them to simple mechanical system using international system of units.	N/A
6. Demonstrate the understanding of fundamental concepts of electricity and magnetism. Apply Ohm's Law to analyze series and parallel circuit in terms of current and potential difference.	N/A
7. Demonstrate good experimental techniques including making observations and measurements, constructing a hypothesis and designing an experiment to test it, analyzing and interpreting experimental results using various word processing/ spreadsheet applications.	#8: Apply scientific reasoning

PHY110L - Elements of Physics Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

PHY201 - Introduction to Physics I

Overview

Course Description
A noncalculus-based survey of classical mechanics and heat for students. Topics studied include rectilinear motion; vectors and projectile motion; Newton's law of motion; work and energy; impulse, momentum, and collisions; circular motion and rotational dynamics; temperature; calorimetry; heat transfer; kinetic theory of gases; and thermodynamics. Computers are frequently used in lab for data acquisition and analysis.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Math Placement - Advanced Level

Advisement Comments
Prerequisite(s): Advanced Level Math Placement or
MAT 130 (C or better) or MAT 165 (C or better)

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate knowledge of Newton's Laws of Motion and apply them to simple physical systems using international system of units.		
Demonstrate knowledge of the Law of Conservation of Energy and apply it to simple mechanical systems using international system of units.		
Demonstrate knowledge of the Law of Conservation of Momentum and apply it to simple mechanical systems using international system of units.		
Demonstrate knowledge of the Laws of Rotational Dynamics and learn how to apply them to simple mechanical systems using international system of units		
Demonstrate knowledge of the concepts and phenomena in the fields of heat and thermodynamics and apply them to simple mechanical system using international system of units.		
Demonstrate good experimental techniques including making observations and measurements, constructing a hypothesis and designing an experiment to test it, analyzing and interpreting experimental results using various word processing/ spreadsheet applications.	3	8

PHY201L - Introduction to Physics I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

PHY202 - Introduction to Physics II

Overview

Course Description
This continuation of the algebra-based physics sequence includes major topics of wave motion; sound; reflection and refraction of light, mirrors, thin lenses, and optical instruments; interference and diffraction; electric fields; potential difference, current, resistance, and capacitance; DC and AC circuits; magnetic fields and forces; electro-magnetic induction; and nuclear decay and half-life. Computers are frequently used for data acquisition and analysis.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
PHY201 Introduction to Physics I

Advisement Comments
Prerequisite(s): PHY 201 (at least a “C”)

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate knowledge of the concepts and phenomena of wave motion and be able to articulate the principles of superposition, interference, diffraction, and resonance of waves.	N/A
2. Demonstrate an understanding of the fundamental concepts of electricity and magnetism and analyze circuits in terms of current and potential difference. Apply Coulomb's Law, Faraday's Law, Ohm's Law, and Lenz's Law to solve problems in electromagnetism.	N/A
3. Understand the principles of geometrical optics and physical optics.	N/A
4. Explain models of nuclear physics and how they relate to observed results, and solve problems concerning radioactive decay.	N/A
5. Demonstrate good experimental techniques including making observations and measurements, constructing a hypothesis and designing an experiment to test it, analyzing and interpreting experimental results using various word processing/ spreadsheet applications.	#8: Apply scientific reasoning

PHY202L - Introduction to Physics II Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

PHY210 - General Physics I

Overview

Course Description
This calculus-based physics course provides an in-depth study of mechanics and heat. Major topics in mechanics are measurement, vectors, friction, equilibrium of a particle and a rigid body, description of motion in a straight line and in a plane, Newton's laws of motion and universal gravitation, work and energy, and momentum. Major topics in heat are temperature and expansion, heat measurements, heat transfer, thermodynamics, and kinetic molecular theory. The laboratory supports the theory and emphasizes experimental techniques and error analysis. Computers are used extensively in the laboratory for data acquisition and analysis.

Total Credits

Total Credit Hours:
4

Billing Hours ⓘ

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
MAT191 Calculus & Analytic Geometry I

Advisement Comments
Prerequisite(s): MAT 191 (at least a "C")

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVES	COLLEGE-WIDE COMPETENCY
1. Demonstrate the principles of kinematics in 1D and 2D and apply them to simple physical systems using international system of units.	1	1
2. Define the concept of force and apply Newton's Laws of motion.	1	1
3. Illustrate the knowledge of law of conservation of energy.	1	1
4. Demonstrate the law of conservation of momentum.	1	1
5. Illustrate the concept of rotational dynamics.	1	1
6. Illustrate the general laws of thermodynamics, heat transfer and their applications to physics.	1	1
7. Demonstrate good experimental techniques including making observations and measurements, constructing a hypothesis and designing an experiment to test it, analyzing and interpreting experimental results.	2	5,8

PHY210L - General Physics I Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

PHY215 - General Physics II

Overview

Course Description
This continuation of the calculus-based physics sequence includes an in-depth study of electricity and magnetism, waves, sound, and light, and selected topics in modern physics. Major topics studied in electricity and magnetism are Coulomb's Law; electric field and potential; capacitance; electric current, resistance, and electromotive force; direct current circuits and instruments; magnetic fields and forces; induced emf; inductance; alternating current circuits; and electromagnetic waves. The study of waves and sound includes the mathematical description of waves. The study of light includes both geometric and physical optics. Special topics in modern physics include quanta, the nucleus, and nuclear decay and transformations. The laboratory supports the theory and provides a great range in experimental techniques. Computers are used for data acquisition and analysis when appropriate.

Total Credits

Total Credit Hours:
4

Billing Hours ⓘ

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
PHY210 General Physics I, MAT196 Calc & Analytic Geometry II

Advisement Comments
Prerequisite(s): PHY 210 (minimum grade of “C”);
MAT 196 (minimum grade of “C”)

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
1. Demonstrate the concept of wave motion and apply it to acoustical phenomena.	1	1
2. Identify and illustrate physical concepts and terminology used in optics.	1	1
3. Demonstrate the fundamental concepts related to electricity.	1	1
4. Demonstrate the fundamental concepts related to magnetism.	1	1
5. Demonstrate good experimental techniques including making observations and measurements, constructing a hypothesis and designing an experiment to test it, analyzing and interpreting experimental results.	2	5,8

PHY215L - General Physics II Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
3

PHY250 - Select Topic/Natural Science

Overview
Course Description
An interdisciplinary science course designed to introduce students to various topics within the natural sciences. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include the human genome project, string theory, stem cell research, history of science, endocrine disruption, global environmental issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as BIO/CHE/PHY 251.

Total Credits
Total Credit Hours:
1

Billing Hours
Billing Hours Min:
1

Lecture Hours
Lecture Hours (per week):
1

Requirements
Prerequisites
BIO110 General Biology I, CHE111 General Chemistry I

PHY251 - Select Top/Natural Science II

Overview
Course Description
An interdisciplinary science course designed to introduce students to various topics within the natural sciences. Topics will be selected at the instructor's discretion and generally vary each semester. Possible themes include human genome project, string theory, stem cell research, history of science, endocrine disruption, global environment issues, fad diets, Nobel laureates, genetically engineered products, human sexuality, quantum mechanics, or issues in pharmacology. Students may repeat this course for credit, provided that they do not enroll in semesters featuring the same theme: their transcripts will list the second enrollment as BIO/CHE/PHY 251.

Total Credits
Total Credit Hours:
1

Billing Hours
Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
PHY250 Select Topic/Natural Science

PLG105 - Law Office Technology

Overview

Course Description
This is a beginning course introducing computer hardware and software basics that apply to the legal environment. Students will learn Microsoft Office components including Teams, Word, Excel, OneNote, PowerPoint, and Outlook, and the Windows operating system as they are used in the day-to-day life of paralegals. Students will also explore legal specific software including but not limited to TrialDirector, Clio, NetDocuments, iManage, and Concordance.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Identify basic computer terminology frequently used in legal organizations.	Think critically
2. Demonstrate ability to draft, edit, and print short legal documents by using a word processor and document assembly software.	Think critically
3. Demonstrate ability to develop short spreadsheets used in the legal environment.	Think critically
4. Explain the importance of timekeeping and billing, the types of legal fee agreements, and how computers can be used to expedite the timekeeping and billing process.	Use current technology effectively
5. Explain how legal and factual researches are done on the Internet.	Use current technology effectively
6. Demonstrate the ability to use Westlaw and/or Lexis to conduct legal research.	Use current technology effectively
7. Explain how the cloud is used in the legal environment, and demonstrate an understanding of security and confidentiality issues related to electronic transmission of documents/information.	Use current technology effectively
8. Demonstrate ability to use case management and docket control programs to manage and control a legal organization's cases and its tasks to be completed and scheduled.	Communicate effectively
9. Understand how to provide litigation support to litigators, including how to build litigation support databases, strategies for searching and extracting information from databases.	Communicate effectively
10. Demonstrate an understanding of the principles of electronic discovery, an ability to work effectively in an automated courtroom, and the ability to design and execute effective presentations.	Use current technology effectively
11. Earn a legal technology Certificate from the National Society of Legal Technology	Use current technology effectively

PLG115 - Law Firm Experience

Overview

Course Description

This course explores the legal workplace environment and the skills necessary for employment in a legal office setting. Some of the areas that will be covered are telephone skills, office equipment usage, letter and memo format, factual research, and the various divisions and functions included in the court sturcture. The course will also review the legal terminology in specific areas of law as well as various document preparation techniques.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Place a telephone conference call.	1	2
Send a letter certified mail.	1	5
Demonstrate the proper procedure for answering and placing a telephone call in an office setting, along with the ability to record a proper message.	2	2
Compose and send e-mail messages that are appropriate to an office setting.	2	2
Use a docket (calendar) control system.	1	1
Track of billable and non-billable time in a diary and transfer that time to a timesheet and a computerized system.	1	1
Properly format legal documents, letters, and memorandums.	1	1
Locate information on the Internet and other sources while evaluating for credibility.	1	6
Define and explain the terminology in Contract Law, Domestic Relations Law, Real Estate Law, Estates and Trusts, and Bankruptcy Law and various other areas of law as well as drafting of basic documents related to various areas of law.	3	6

PLG120 - Intro to Paralegal Studies

Overview

Course Description

The paralegal profession is investigated in this course. Topics studied include careers as a paralegal, job searching techniques, ethics, and limitations of paralegals. The course will also explore the court systems of the federal government and Pennsylvania, as well as introduce legal research, including but not limited to mandatory and binding precedent, persuasive precedent, and legal citiations. Legal writing and terminology are also course components as well as legal analysis and various systems utilized in a law office.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

Course Objective	Program Objective and/or Collegewide Student Competency
1. Appraise the role of paralegals in judicial/legal framework and functions performed.	PO 2
2. Identify the ethical limitations of paralegals in the work force.	PO 3/CSC 9
3. Diagram a judicial opinion.	PO 2/CSC 1
4. Discuss the nature and purpose of the judicial branch of the government, issues of jurisdiction, and venue.	PO2
5. Distinguish the proper utilization of a paralegal and the appearance of the unauthorized practice of law by a paralegal.	PO 3/CSC 9
6. Demonstrate oral communication skills necessary in the practice of law.	PO1/CSC 2
7. Identify the function and roles of the courts at both the Federal and Pennsylvania state level.	PO 2
8. Diagram the Pennsylvania court system including the jurisdiction of each court.	PO 2
9. Demonstrate a knowledge of the alternatives to court, including the requirements necessary to implement and utilize ADR.	PO 2
10. At the end of this course, students will be able to apply various fundamental legal concepts, including but not limited to employment law and intellectual property, to factual situations encountered in the employment of paralegals.	PO 2
11. Implement legal analysis by analyzing factual situations and determining the legal issue.	PO 1/CSC 1
12. Distinguish between mandatory and secondary authority.	PO 2/CSC1
13. Interpret results of the legal research and determine whether it is mandatory or persuasive authority.	PO 2/CSC1
14. Explain the various types of legal writing and the components of each.	PO 2/CSC1
15. Draft legal letters and an in-class memorandum of law.	PO 1/CSC 2
16. Conduct limited legal research using books and CALR.	PO 1/CSC 5
17. Draft citations and interpretation of same.	PO 2/CSC 1
18. Explain the functions of paralegals in various areas of law.	PO1

PLG125 - Workers' Comp Prac Paralegal

Overview

Course Description

This course provides paralegal students with an understanding of the workers' compensation laws and the legal concepts embodied in the Pennsylvania Workers' Compensation Act as well as the practice and procedure before administrative judges, trial issues, and relationship to other administrative entitlements, such as Social Security Disabilities.

Total Credits

Total Credit Hours:

2

Billing Hours ⓘ

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

2

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Discuss the Pennsylvania Workers' Compensation Act and legal concepts embodied in the Act.	PO2/CWC 1
2. Explain the right to compensation to employees for injuries arising out of the employment relationship.	PO1/CWC3
3. Calculate benefits for different types of employment situations.	PO1/CWC3
4. Explain the impact of change of status on benefits and the calculation thereof.	PO2/CWC2
5. Explain the differences between occupational injury or disease and tort liability.	PO2/CWC2
6. Explain obligations of employers and employees upon occurrence of injury.	PO1/CWC2
7. Explain the practice and procedure before workers' compensation judges and appellate tribunals.	PO1/CWC2
8. Analyze various trial issues including burden of proof, evidence, presumptions, expert witnesses, and attorneys' fees.	PO3/CWC1

PLG130 - Social Security Disab Practice

Overview

Course Description
This course provides paralegal students with an understanding of the laws involved in Social Security and Disability practice, as well as the practice and procedure before administrative judges, trial issues, and relationship to other administrative entitlements, such as workers' compensation.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Discuss social security disability practice and the legal concepts embodied in the law.	
2. Explain the right to compensation to individuals for injuries under social security disability.	
3. Demonstrate the ability to review a disability file and obtain medical documentation when necessary.	
4. Explain the practice and procedure before social security judges and appellate tribunals.	
5. Analyze various trial issues, including burden of proof, evidence, presumptions, expert witnesses, and attorney fees.	
6. Conduct an initial interview with a social security disability claimant and obtain pertinent information to evaluate medical and potential benefit aspects of claim.	
7. In a successful case, be able to determine whether benefits and attorney's fee have been correctly calculated.	

PLG135 - Interviewing for Paralegals

Overview

Course Description

This course provides paralegal students with an understanding of the interviewing skills that are to be mastered in legal setting. Interviewing skills are essential skills for the well educated paralegal. The students will be exposed to the different types of interview situations that may be encountered in a legal setting. The students will demonstrate their knowledge of interviewing by conducting various types of interviewing. The students will also be required to understand the ethical responsibilities in interviewing. This course will also provide the students with the communication skills necessary for effective interviewing techniques.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Prepare for an interview and the kinds of skills employed during the interviewing process.	PO 1/CWC 2
2. Outline the common types of client interviews paralegals may conduct and the different type of witnesses paralegals may need to interview during a preliminary investigation.	PO 2/CWC 1
3. Demonstrate the various skills that are necessary to conduct a successful interview.	PO 1/CWC 1
4. Exhibit the ability to conduct an initial client interview.	PO 1/CWC 2
5. Practice the ability to conduct follow-up client interviews.	PO 1/CWC 2
6. Employ ethical considerations in interviewing.	PO 3/CWC 9
7. Draft appropriate correspondence and internal memorandums.	PO 2/CWC 1
8. Develop and maintain relationships with clients.	PO 1/CWC 2
9. Differentiate the law relevant to each case and how the law affects the interview of the case.	PO 2/CWC 1

PLG150 - Torts and Personal Injury Law

Overview

Course Description

Introduces the student to civil wrongs and the legal terminology of torts and personal injury law. Entails an intensive study of various types of torts. Gives the student an overview of tort and personal injury law. Helps the student to develop an understanding of the basic principles of law that apply to personal injury. Hypothetical problems are presented to illustrate how the abstract rules pertain to real life. Gives the student the knowledge to recognize what is a tort and the various types of torts. Students will be able to identify the elements of tort causes of action as well as prepare defenses. Legal analysis is stressed through the preparation of case briefs and situational analysis.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Brief several court opinions and apply law to similar situations through hypothetical factual situations.	PO 2/ CWC 1
2. Demonstrate the difference between an intentional tort and negligence.	PO 2/ CWC 1
3. Explain the elements of negligence.	PO 2/ CWC 1
4. Identify the reasonable person standard as it applies to negligence.	PO 2/ CWC 1
5. Explain the defenses to negligence.	PO 2/ CWC 1
6. Explain the torts of defamation and malpractice.	PO 2/ CWC 1
7. Translate how strict liability is enforced and identify abnormally dangerous activities.	PO 2/ CWC 1
8. Describe the wrongful death statute and evaluate damages as it relates to a hypothetical situation.	PO 2/ CWC 2
9. Demonstrate how elements of cause of actions are integrated into a civil complaint.	PO 1/ CWC 1
10. Demonstrate how defenses are utilized to respond to plaintiff's cause of action.	PO 2/ CWC 1
11. Distinguish between contributory and comparative negligence.	PO 2/ CWC 1
12. Apply the significance of a plaintiff's assumption of the risk.	PO 2/ CWC 1
13. Demonstrate an ability to distinguish between jointly and severally liable.	PO 2/ CWC 1
14. Interpret the significance of a "Mary Carter" or "Gallagher" agreement.	PO 2/ CWC 1
15. Detail the nature of a release and the significance of joint and several liability among defendants.	PO 2/ CWC 2
16. Implement the legal nature of satisfaction and contribution among tort-feasors.	PO 2/ CWC 1
17. Explain the difference between informed consent, battery, and negligence as it relates to medical injury actions.	PO 2/ CWC 1
18. Explain a loss of consortium cause of action.	PO 2/ CWC 1
19. Describe vicarious liability and its impact on tort law.	
20. Evaluate the categories of damages and illustrate the difference between general, special punitive and nominal damages.	PO 2/ CWC 1
21. Review medical records and draft a summary of the records.	PO 1/ CWC 5
22. Utilize the resources that are available for the interpretation of medical records.	PO 1/ CWC 5

PLG200 - Civil Litigation & Procedures

Overview

Course Description

Intended to be a follow-up to the Torts and Personal Injury Law course. Enables the student to assist in all aspects of civil litigation including the drafting of pleadings. Entails an extensive study of pretrial, trial, and posttrial procedures.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Corequisites
PLG150 Torts and Personal Injury Law, ENG105 Research and Composition

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVES	COLLEGEWIDE STUDENT COMPETENCY
1. describe what civil litigation is and the skills required of a litigation paralegal such as drafting pleadings, discovery demands, reviewing medical records, and interview clients.	PO1	CWC1
2. diagram the court system, both federal and state jurisdiction.	PO2	
3. employ interviewing and investigation skills to determine if a lawsuit exists.	PO1	CWC2
4. utilize the internet to conduct factual investigation.	PO1	CWC6
5. conduct interviews of clients and witnesses and prepare a written summary of the interview.	PO1	CWC2
6. differentiate the components for selecting an appropriate forum for a civil action.	PO2	CWC1
7. implement the skills necessary to determine if an action is filed within the applicable statute of limitations.	PO1	CWC1
8. draft complaints and answers in both federal and state jurisdiction, particularly United States District Court - Eastern District of Pennsylvania and Lehigh County Court of Common Pleas.	PO1	CSC1
9. draft appropriate responses and motions necessary in litigation and understand all supporting documents required to accompany them.	PO1	CWC1
10. demonstrate the ability to file pleadings with the court.	PO1	CWC5
11. employ techniques necessary to locate information about procedural rules in both federal and local state jurisdiction.	PO2	CWC5
12. draft appropriate discovery demands necessary to ascertain information needed to facilitate the client's position in litigation.	PO1	CWC2
13. identify the documents necessary for arbitration and demonstrate the ability to locate the procedural amounts for mandatory arbitrations in both federal and local state jurisdiction.		
14. employ the various techniques involved in the preparation for trial, including witness preparation, demonstrative evidence selection and document control.	PO1	CWC2
15. draft subpoenas for witnesses for depositions and trials.	PO2	
16. describe service of process of pleadings and subpoenas in both federal and local state jurisdiction.	PO2	
17. draft the documents required for federal and state civil appeals.	PO2	
18. demonstrate how to digest and index various legal documents including depositions and medical records.	PO1	
19. draft the documents required for an execution of the judgment in both federal and local state jurisdiction.	PO1	
20. draft a closed-end memo on the requirements of minimal contracts necessary to obtain personal jurisdiction of a defendant.	PO2	CWC1

PLG215 - Law Office Management

Overview

Course Description

Covers the fundamentals of law office management. Designed to familiarize the paralegal with the practical inner-workings of a law office including understanding law office procedures. Law office management goes beyond mere efficiency and productivity and includes being sensitive to ethical concerns and providing quality legal services to clients in an affordable manner. Covers an array of topics that will be encountered in a law office setting.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

a. demonstrate the ability to draft law practice policies and procedures.

b. demonstrate how to market the law firm, by drafting a sample advertisement and marketing plan.

c. distinguish between timekeeping and billing.

d. describe the various types of fees charged in a law office.

e. develop a system, including forms, checklists, and written information.

f. identify requirements for fee agreements.

g. describe the importance of documenting all client communication.

h. draft an engagement letter.

i. recognize various law office information systems.

j. demonstrate an ability to select appropriate computer hardware and software for a legal setting.

k. construct an effective law library, with the consideration a law firm's area of practice, and demonstrate how to maintain and update a law library.

l. conduct the hiring process, including ad placement, interviewing, selection, and wage administration.

m. employ various management techniques for employees, including effective performance appraisals and proper feedback to employees.

PLG220 - Contract Law & Business Organ

Overview

Course Description

Provides paralegal students with an understanding of basic business law concepts. The students will demonstrate their knowledge of contracts by drafting various contract clauses and an entire contract. The students will also be required to understand judicial interpretation of the contract principles by completing assignments. Educates paralegal students with regard to business organization and prepares the student to work in the area of corporate law as a paralegal. Gives the students an overview of the laws and the theory as well as practical information concerning sole proprietorships, partnerships, and corporations. Students will be required to analyze cases to illustrate the application of laws being discussed. The students will also be required to draft various documents regarding business operations. Warranties, sales, and agency agreements are also reviewed.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Discuss the legal requirements necessary for the formation of a contact.	PO2/CWC 2
2. Distinguish how contracts are discharged and remedies for a breach of contract.	PO2/ CWC1
3. Demonstrate the ability to analyze a contract and determine if all necessary elements are present.	PO2/CWC 1
4. List and describe the ability to distinguish between the types of business organizations.	PO2/CWC 1
5. Discuss the operation of the corporation, including shares, directors, and officers.	PO1/CWC 1
6. Draft the appropriate documents and notification of appropriate parties for winding up all types of business organizations.	PO1/CWC 5

PLG225 - Law of Corporations & Other Bu

Overview

Course Description
This course will cover the formation, operation, and dissolution of various kinds of business organizations. Subjects covered include: sole proprietorships, corporations, partnerships, and the law of agency and employment agreements.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Understand the structure of the federal and state legal system, its powers, methods of operation, and the impact the legal system has on business organizations; and evaluate factual situations with regard to the business application of administrative law and the government regulation of business.	
2. Understand and evaluate the business application of the basic principles of business formation, including sole proprietorships, limited liability companies, partnerships (general, limited and professional partnerships) and corporations; resolve questions of law arising in these areas, and identify the fundamental differences and characteristics of the major business organizations.	
3. Identify and evaluate the application of the law regarding an invalidly formed corporation, including the potential liability of incorporators, corporate officers and shareholders.	
4. Understand and apply the basic principles of agency law in the areas of partnership and corporate relationships with application to factual situations.	
5. Identify and evaluate the tax law impacting business organizations and its application to factual situations.	
6. Understand the role of the paralegal in assisting the attorney in the preparation of legal documents for business organizations, such as powers of attorney, general partnership agreements, articles of limited partnership, and corporate documents.	
7. Understand the ethical considerations for a paralegal that assists an attorney working in the area of business organizations.	

PLG227 - Criminal Law & Proc for Parale

Overview

Course Description

This course presents a study of the substantive and procedural aspects of criminal law and the role of the paralegal working in the area of criminal defense or criminal prosecution. Students will study the general principles of criminal liability, analysis of particular crimes, parties to crimes, substantive defense to crimes, and various pleadings relating to criminal law and procedure. Constitutional safeguards and procedures from arrest through trial, sentencing, punishment, and appeal are also studied. This course also examines the ethical considerations relating to criminal law and procedure.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

PLG228 - Immigration Law for Paralegals

Overview

Course Description

This course will provide an introductory overview of US immigration law with a focus in the paralegal's role in case assembly, compilation, intake, and processing. Students will learn to identify common issues and available benefits associated with processing nonimmigrant and immigrant visa cases to discuss with the Attorney. Students will also gain an overall understanding of both the nonimmigrant and immigrant visa process and US citizenship including the forms, documents, and filing procedures associated with each.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
PLG120 Intro to Paralegal Studies, PLG150 Torts and Personal Injury Law

Advisement Comments
Prerequisite(s): PLG 120 and (PLG 150 or 220)

The course was developed in response to a legal community survey that revealed that Paralegals in the surrounding areas were involved in this specialized area of law. In addition, this course enhances the PLG electives offered to our students therefore providing a more thorough learning experience and increased career possibilities.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the basic features of the federal court systems involving immigration issues.		
Identify the basic areas of immigration law including asylum, amnesty, refugee and family and employment-based sponsorship.		
Complete a client interview intake sheet.		
Identify the permissible activities under B-1/ B-2 visas		
Complete the application for different immigration statutes.		
Demonstrate the procedure for obtaining a temporary visa for working, studying, and for particular occupations.		
Demonstrate the procedure for obtaining temporary and permanent visa for victims.		
Apply the knowledge to obtain a family-based residency.		
Understand the difference between the employment- based and investor immigrant preferences categories with an emphasis on employment based.		
Distinguish what is necessary to obtain asylum in the United States.		
Demonstrate how to seek relief before the courts.		
Describe the process to obtain citizenship in the United States.		
Demonstrate how to represent a client before various governmental agencies.		
Students will understand the structure and function of immigration courts and the role of private lawyers and governmental agencies.		
Describe the basic features of the federal court systems involving immigration issues.		

PLG230 - Estates and Trusts

Overview

Course Description
Enables the student to understand the legal principles involved in estate work and to demonstrate the skills necessary to assist in the preparation and completion of all documents incident to estate practice. Includes a coverage of living wills and various types of trusts as well as probate administration.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate the ability to assist in the financial planning of a client's estate.	PO 1/CWC 1
2. Distinguish the financial needs and financial wishes of a client.	PO 2/CWC 3
3. Compile and categorize all of a client's assets, including property description and ownership documentation.	PO 2/CWC 3
4. Demonstrate the ability to draft a valid trust.	PO 2/CWC 1
5. Demonstrate the ability to draft a will and all accompanying documents based upon client specifications.	PO 2/CWC 1
6. Demonstrate the ability to administer and probate an estate.	PO 2/CWC 3
7. Prepare appropriate federal, state, and local tax returns for the administration of decedent's property.	PO 2/CWC 3

PLG235 - Family Law

Overview

Course Description
Provides the student with a thorough, working knowledge of the basics of family law. Covers the essentials of family law and the tasks that a paralegal might perform in an active practice, such as client interviewing and coordinating discovery. Entails a study of the various aspects involved in family law including marriage, antenuptial agreements, divorce, spousal and child support, property distribution, divorce proceedings, and adoption. The course materials are supplemented by Pennsylvania specific materials.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Discuss the requirements of a valid marriage.	PO
2. Demonstrate the ability to draft a valid premarital agreement.	PO/CW
3. Demonstrate the ability to ascertain a protection from abuse for a client.	PO
4. Distinguish divorce from annulment.	PO
5. Distinguish between the various child custody arrangements.	PO
6. Describe the property distribution process.	PO/CW
7. Distinguish marital assets and nonmarital assets.	PO
8. Discuss the appropriate jurisdiction for divorce, annulments, protection from abuse, and adoptions.	PO/CW
9. Draft a divorce complaint in compliance with jurisdictional requirements.	PO/CW
10. Draft an answer to a complaint in compliance with jurisdictional requirements.	PO/CW
11. Conduct the necessary discovery in a divorce proceeding.	PO/CW

PLG240 - Bankruptcy Law

Overview

Course Description
The course presents a practical approach to the understanding of bankruptcy law. It will familiarize the student with the bankruptcy code as well as the bankruptcy process. It will approach the bankruptcy process with a practical perspective and "hands-on" approach featuring research and drafting projects.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
Demonstrate ability to research Bankruptcy Court website to obtain procedural requirements for bankruptcy filings.	PO 2/CSC 6
Distinguish between liquidation Chapters of the Bankruptcy Code and reorganization Chapters of the Bankruptcy Code and which Chapters of the Bankruptcy Code apply to each.	PO 2/CSC 1
Demonstrate ability to prepare required documents for filing an uncontested Motion with the Bankruptcy Court.	PO 2/CSC 1
Demonstrate understanding Federal Exemptions and application of exemptions to specific situations.	PO 2/CSC 1
Define what activities by creditors are prohibited by the Automatic Stay under the Bankruptcy Code and under what circumstances relief from the Automatic Stay can be obtained.	PO 2/CSC 1
Demonstrate ability to understand procedures for preparation of noticed Motions to be filed with Bankruptcy Court.	PO 2/CSC 1
Explain liens under the Bankruptcy Court and describe three types of liens	PO 2/CSC 1
Define Fraudulent Conveyances under the Bankruptcy Code	PO 2/CSC 1
Demonstrate ability to determine basis of Chapter 13 Plans and apply to preparation of Chapter 13 Plan.	PO 2/CSC 1
Demonstrate ability to properly list information on Bankruptcy Petition, Schedules, and Statement of Affairs for a Chapter 7 Bankruptcy.	PO1/CSC 1

PLG245 - Legal Research and Writing

Overview

Course Description

It involves the understanding of the various sources involved in law. Includes primary and secondary resources. The student will be able to distinguish between binding and persuasive law. The student will combine legal research with legal writing by completing problems and preparing a memorandum of law. Legal writing entails case briefing, drafting a memorandum of law, and review of components of legal correspondence.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition, PLG120 Intro to Paralegal Studies

Advisement Comments

Prerequisite(s): ENG 105; PLG 120 and 200; or PLG 215
or 220; or faculty consent or permission of instructor

Please consult the prerequisites necessary for this course. Students, that do not meet the prerequisites, can also meet with an Advisor or Program Coordinator to determine if they can be successful in the class.

Learning Objectives

Learning Objectives
Upon completion of this course, the student will be able to:

Course Objective	Program Objective	Collegewide Student Competency
1. demonstrate the ability to apply legal analysis to a factual situation and determine what legal issue(s) exist(s).	2	1
2. differentiate between the sources of law.		1
3. identify the importance of citation and utilize the Uniform System of Citation.	2	1
4. demonstrate the ability to distinguish official reports from unofficial reports and to provide a proper citation for the legal authority.	2	1
5. employ the federal and state digests implementing the descriptive word and key number system.	2	1
6. demonstrate the ability to update the law and access the use of the law in the setting intended.	2	1,5
7. draft all types of legal writing including, but not limited to, case briefs, memorandums of law, and legal correspondence.	1	2

PLG250 - Legal Internship

Overview

Course Description
Provides the student with hands-on experience while working at a law firm, court house, bank, or other acceptable locale. The student will work a total of 225 hours at the business during the semester as well as attend meetings to discuss job searching skills. Intended to be taken after a majority of the course work is completed. Must be pre-approved by the program coordinator according to deadlines established in internship manual. Paralegal Studies students are responsible for locating and selecting internship placement sites. Students are responsible for presenting credential levels required by the internship site. It is the sole discretion of the internship site and future employers as to what level of credentialing is required by the position roles. Students who possess a "record" status may experience limitations in available internship placements anf future employment in the paralegal field.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
ENG105 Research and Composition, CIS105 Intro to Comp & Applications, PLG120 Intro to Paralegal Studies, PLG150 Torts and Personal Injury Law, PLG200 Civil Litigation & Procedures

Corequisites
RES110 Real Estate Law, PLG215 Law Office Management, PLG255 Legal Writing

Advisement Comments
Prerequisite(s): ENG 105, 106; CIS 105; Social Science/ Humanities; Math/Science; PLG 120, 150, 200- with a minimum grade of B in the course, 245- with a minimum grade of C in the course; GPA of at least 2.5; faculty

approval required.

Learning Objectives

Learning Objectives
The student should enroll in this class after a majority of the classes have been successfully completed.

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe the dynamics of a law firm or related business.	1	1
Recognize the complexity of a filing system.	1	1
Assess the role of a paralegal in the office.	1	1
Analyze and complete relevant on-the-job assignments.	3	1,2,4,7,9
Draft a resume and application letter.	1	2
Complete a mock interview session.	1	2

PLG252 - Virtual Para. Law Practice Exp

Overview

Course Description
This course will provide the student with a virtual paralegal experience working at a law firm. The student will work a total of 120 hours at the virtual law firm during the semester as well as attend meetings to discuss job searching skills. Intended to be taken after a majority of the coursework is completed. Must be pre-approved by the program coordinator according to deadlines.Students who possess a "record" status may experience limitations in future employment in the paralegal field.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Other Hours

Other Total Hours:
225

Requirements

Corequisites
PLG255 Legal Writing

Advisement Comments
Faculty approval is required. This course is designed to offer an internship to students that may be prohibited from participating due to time limitations or other concerns. Advisors should speak to the Program Coordinator to determine if student would benefit from this experience.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Analyze client problems and formulate solutions.	1	1
Draft professional correspondences.	3	2
Draft pre-trial and trial documents.	3	2
Perform factual and legal research.	3	6
Use technology appropriate to the needs of a legal office.	2	5
Demonstrate the legal and ethical principles that guide the behavior and conduct of all legal professionals.	4	9

PLG255 - Legal Writing

Overview

Course Description

Legal writing skills are reinforced through various assignments. Students draft case briefs, complaints, answers, discovery demands, motions, and various types of legal correspondence. Legal research is utilized to respond to fact simulation that results in a memorandum of law. Grammar competency is expected.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition, ENG106 Introduction to Literature, PLG120 Intro to Paralegal Studies, PLG200 Civil Litigation & Procedures, PLG245 Legal Research and Writing

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. understanding and using the IRAC method of writing and research.	PO 2/CWC 1
2. ability to synthesize cases	PO 2
3. understanding persuasive authority vs. binding authority.	PO 2/CWC 1
4. legal writing using layman's terminology.	PO 1/CWC 2
5. ability to produce quality writing (free of spelling and punctuation errors, good sentence formation and/or structure).	PO 1/CWC 2
6. understanding the various types of legal writings.	PO 1
7. ability to conduct computer research assignments quickly and accurately.	PO 1/CWC 6

PLG260 - Independent Study

Overview

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

PSC130 - Intro to Political Science

Overview

Course Description
Course considers philosophy and development of contemporary political ideologies. Institutions of modern governments are compared and analyzed. Philosophical, behavioral, institutional, and historical approaches to the study of political science are examined to study the discipline as a science.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
1. Define and evaluate assertions about fundamental political concepts and systems of government.

2. Examine role of the citizen in a representative democracy.

3. Identify and evaluate the rationales for decision-making: legitimacy, sovereignty, and authority.

4. Recognize the central concepts and language used in political science. Demonstrate these according to the study of the institutions, policies, and ideals of governments.

PSC141 - American Federal Government

Overview

Course Description
The functions of the United States Government under the Constitution are stressed to illustrate the federal concept of government generally. Included among the topics studied are problems and advantages of federalism; civil liberties and civil rights; law making; public opinion and elections; interest groups and political parties; the three branches of government; the increasing activities of the Federal Government; and some comparisons and contrast of the American governmental system with contemporary foreign governments.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives
1. Identify the purposes and functioning of government at the national level in a federal system. Explain this function within the system of federalism and separation of powers.

2. Recognize the origins and development of the basic principles of our government historically.

3. Appraised the organizational structure and power structure of the United States government in an attempt to discover the critical points for citizen input, whether as individuals or as members of political parties or interest groups.

4. Evaluate the techniques of propaganda, governmental and private, which must be overcome in order for citizens to make decisions based on facts rather than bias.

5. Examine a variety of central issues confronting our nation today, pro and con, in a nonthreatening atmosphere, with an emphasis on the latest developments in the news.

PSC142 - State and Local Government

Overview
Course Description
A study of the organization and functions of state and local governments as exemplified in Pennsylvania and their place in our federal system. Topics studied include state, county, township, borough and city government; metropolitan cooperative/consolidation efforts; special purpose districts; and the contributions that active citizens can make in their state and communities.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Learning Objectives
Learning Objectives
1. Describe the purposes and functioning of government at the state and local levels.

2. Examine the relationship between the states and the national government in our federal system.

3. Outline the lawmaking process within state and local government.

4. Examine a variety of central issues in state and local government today and contrast these issues pro and con.

5. Recognize citizen rights and responsibilities as a member of a state/local community.

PSC207 - Latin American Studies

Overview

Course Description
This course is an introduction to the study of Latin America and the Caribbean. Taking into consideration the region's complexity, this class examines the geography, politics, history and culture of the area as well as the nuances of its peoples and societies. Students will explore different approaches to the understanding of the area's economic development, the internal and external struggles over political power and forms of rule, and the intricacy of the region's relationship with the Unites States. Topics also include racial and ethnic identity, gender and sexuality dynamics, migration and the migrant experience, and the emergence of new cultural expressions.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

PSC230 - American Federal Government

Overview

Course Description
Functions of the United States Government under the Constitution are stressed to illustrate the federal concept of government. Included are problems and advantages of federalism; civil liberties and civic responsibilities; political parties; the three branches of government; the increasing activities of the Federal Government; and a comparison and contrast of the American governmental system with contemporary foreign governments.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
3

PSC231 - State and Local Government

Overview

Course Description
Study of the organization and functions of state and local governments (as exemplified in Pennsylvania) and their place in our federal system. Topics studied include state, county, township, borough, and city governments; metropolitan cooperative/consolidation efforts; special purpose districts; and the contributions that active citizens can make in their state and communities.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

PSC233 - Intro to Public Administration

Overview
Course Description
This course will introduce the student to the theory, context, scope, and contemporary practice of public administration. The student will survey and become familiar with theories of organization, the statutory authority for administrative decision-making, the historical development of public administration in the United States, the policy-making process, and practical planning tools for the practice of public administration. Students considering a career in public administration, or those who might already hold a position and would like a deeper understanding of the field would benefit from this course.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Placement Exam Requirements
Reading Placement - Intro Level

Learning Objectives
Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Define the scope of public administration in America today;	
2. Identify the strengths and weaknesses in critical models of organizational decision-making;	
3. Explain the statutory authority for administrative decision-making in the United Sates and at the state level in Pennsylvania;	
4. Identify critical elements of the policy-making process and how these apply to real-time decision-making;	
5. Identify ethical considerations relevant to the policy-making process and how these apply to real-time decision-making;	
6. Explain the differences, similarities, and relationships among the for-profit, nonprofit, and public sectors; and	
7. Identify the critical elements in public sector planning, including budgeting, contracting, human resource management, and measures of performance.	

PSC235 - Constitutional Law

Overview

Course Description

Examines the Supreme Court of the United States as the interpreter of our Constitution, and as a participant in the governing process. Emphasis on decisions relative to Due Process and the Criminal Justice System. Included are the development and current application of decisions affecting criminal law and procedures, plea bargaining, juvenile procedures, the corrections system, and the traditional Constitutional areas such as speech and religion.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Read and brief a Supreme Court decision and explain the rationale presented in the majority and dissenting opinions.
2. Trace the origins and development of American Constitutional concepts of the role and functions of the criminal justice system.
3. Identify the most recent decisions affecting the criminal justice system.
4. Discuss the various due process rights of every citizen, and the social rights which balance individual rights.

PSC236 - American Civil Liberties

Overview

Course Description

American Civil Liberties are reviewed via Constitutional decisions of the United States Supreme Court. The issues of due process, religious freedom, racial and sex discrimination, obscenity and the equal protection of the law are examined. Emphasis on recent court decisions.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Examine a Supreme Court decision and translate the rationale presented in the opinion.

2. Identify the origins and development of Anglo-American Civil Liberties and Civil Rights according to the constitution.

3. Outline the most recent decisions regarding American Civil Liberties.

4. Interpret the meaning of liberty in the United States.

PSC237 - International Relations

Overview

Course Description

This course will provide students with an overview of the field of international relations. Beginning with a historical survey of international relations, the course will then analyze issues related to security, the world economy and social issues. The implications of recent developments such as the end of the Cold War, European Integration, crises in the Middle East, and other major international issues will be analyzed.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Summarize the significance of major events shaping the international system since 1648.
2. Identify the principle issues, arenas, and actors in international relations.
3. Explain and evaluate the major IR theories and levels of analysis.
4. Examine the major components of international relations: the structure of the international system and how and why it has evolved, the role of power, the meaning of security and the importance of economic issues.
5. Distinguish and evaluate the role of cultural values and perceptions in relationships among countries.
6. Develop positions on major issues in contemporary IR.

PSC239 - U. S. Foreign Policy

Overview

Course Description

A study of the policy choices, regional and global issues, and trends facing the United States in the contemporary international system. Included is an examination of the nature of international policy formation and its principles, as well as an overview of the history of U.S. foreign policy. Major emphasis is placed on U.S. involvement in world affairs since World War II, always viewed in its current context.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
1. Understand, analyze and apply the U.S.' underlying philosophy and consequent foreign policy development.

2. Identify and understand the application of the variety of tools the U.S. has available to effect its goals in world policy making.

3. Examine and analyze important documents and concepts including the Monroe Doctrine, the Open Door policy, containment, and interdependence so as to be able to explain the reasoning behind U.S. foreign policy choices and decisions, and how they relate to contemporary issues.

4. State, assess, and debate current U.S. policies on issues such as nuclear weapons, the Middle East, terrorism, fossil fuels, the United Nations, Third World debt, poverty, and environmental issues.

PSC260 - Independ Study-Political Sci

Overview

Course Description
Reading, research, and/or experimentation on topic (not otherwise covered in college social sciences curriculum) selected in consultation with a faculty member. Special attention is to be given to the particular abilities and interest of students, with individual guidance for advanced studies. The student may choose: research on selected problems, supervised field studies, reading program, among other alternatives. The course maybe a group of students as well as individual study. The course may be repeated for credit. The student is responsible to adhere to the college policies and procedures for independent study.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
Prerequisite(s): Introductory course in the subject area, minimum GPA of 3.0 in the course subject to be studied, and overall GPA of 3.0, or sufficient evidence of academic strength, and written permission of the instructor and academic dean to justify the independent study.

Learning Objectives

Learning Objectives
The nature of the course is by definition highly variable. Thus specific behavioral objectives are part of student(s) agreement with the cooperating faculty member. The generic behavioral objectives which are expected include:

1. Student(s) should demonstrate ability to state a problem and rationale for wanting to investigate the particular problem.
2. Student(s) should demonstrate initiative, ability to follow through, and thoroughness of literature research and/or reading.
3. Student(s) should demonstrate

- appropriateness of research design
- completeness of reading list

- correctness of a field study approach and method

1. Student(s) should demonstrate a collegiate presentation of results, findings, ideas, and conclusions.

PSC297D - Latin American Studies

Overview

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

PSC297E - Middle East Studies

Overview

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

PSY105 - Psychology as a Major

Overview

Course Description
Psychology continues to grow as a major. Given the broad nature of career opportunities, it is vital for students to understand the field to make informed decisions regarding their career and future education. An overview of the major is discussed in addition to various careers in psychology including human services, counseling and research. Students are introduced to various resources available to them as psychology majors, along with learning valuable study skills for psychology courses. A plan for future study and interests is accomplished based on the cumulative information from the semester.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Corequisites
PSY140 Introduction to Psychology

Learning Objectives

Learning Objectives

1. Demonstrate an understanding of the basics of the field of psychology
2. Identify multiple career opportunities available to people with an Associates, Bachelors, or graduate degree in Psychology
3. Research and develop a future career plan relevant to the field of Psychology.
4. Identify and utilize available internet, print, and professional resources available to psychology majors
5. Demonstrate and articulate multiple valuable study skills for students in psychology.

PSY106 - Writing in APA Style

Overview

Course Description
This course offers information about writing in APA style. The basic components of a research paper are reviewed. Students learn how to cite in-text and in a reference list and how to format a paper in APA style, including figures and tables. Issues relating to writing style in APA are also discussed.

Total Credits

Total Credit Hours:
1

Billing Hours ⓘ

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify the parts of an APA manuscript	
2. Cite sources in-text and in a reference list	
3. Create a template for formatting a paper in APA style	
4. Utilize the correct format for creating a table or figure in APA style	
5. Identify the basic rules of style for writing in APA style	

PSY120 - Psychology of Human Sexuality

Overview

Course Description

This course offers a comprehensive overview of human sexual behavior from a biopsychosocial perspective. This course will emphasize both quantitative and qualitative psychological research and theory on human sexuality and also consider the biological, evolutionary, social, and cultural factors that influence our sex lives. Students will critically evaluate sexual health education programs in a variety of settings (school & community) and understand key issues in sexual health promotion.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate a comprehension of theoretical perspectives and key issue in human sexuality throughout the lifespan and evaluate sexual health education programs.	PO 3; Evaluate Ethical Aspects of Decision Making
2. Demonstrate a working knowledge of gender and sexual orientation, relationships, sexual behaviors, sexual difficulties and solutions.	PO 1; Analyze Human Diversity
3. Describe the needs for and criticism of the sex positive movement.	PO 1; Analyze Human Diversity

PSY140 - Introduction to Psychology

Overview

Course Description

This introductory course will provide students with an overview of the current body of knowledge and methods of the science of psychology. With an emphasis on empirical examination, the course focuses on the historical and contemporary foundations of psychology, cognition, emotions, learning, memory, consciousness, human development, biological bases of behavior, personality, psychological disorders, therapy and social behavior. Emphasis will be placed on the application of psychology to diverse human endeavors and on the students' abillity to recognize and and cope with uncertainty and ambiguity in human behavior.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
Demonstrate a knowledge base in psychology that addresses the breadth and diversity of psychology as a hub science.	Describe and apply psychological principles.	
Discern differences between personal views and scientific evidence concerning psychological phenomena obtained from research, the general public, and the media.	Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems.	Apply scientific reasoning
Articulate the personal relevance of course material, including an understanding of the importance of ethics and social responsibility in a diverse world.		Analyze human diversity

PSY141 - Psych. Applied to Modern Life

Overview

Course Description

This course provides an introductory examination of applied psychological theory. Students will examine the ways in which psychological principles apply to critical aspects of personal adjustment and the capacity that human beings have to face, adapt, and effectively cope with a rapidly changing environment. Emphasis is on identifying, developing, and maintaining personal strategies for individual growth and social adjustment.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Advisement Comments

This class is recommended for any student interested in psychology.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate a comprehension of the major issues of relevance to psychological adjustment and how to apply the theories of adjustment to personal development.	#1 describe and apply psychological principles.	#7 Analyze Human Diversity
Explain the emotional and physiological responses to stressful situations, including life changes and evaluating the positive and negative ways people cope with and manage stress.	#1 describe and apply psychological principles.	#7 Analyze Human Diversity
Examine the many facets of the "self" and articulate the difficulties that may arise when implementing a "self-change" program.	#1 describe and apply psychological principles.	#7 Analyze Human Diversity
Critically review and analyze a self-help book for its thoroughness in discussing a psychological problem and its effectiveness in outlining a specific plan to manage, cope, or solve the associated challenges.	#2 demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems	#1 Think Critically

PSY142 - Industrial & Organizational Psychology

Overview

Course Description

This course is designed to provide an overview of industrial/organizational (I/O) psychology. I/O psychology is a subfield of psychology concerned with various aspects of people in the workplace, including employee productivity and well-being. The "industrial" part deals with personnel functions, such as analyzing jobs, appraising employee performance, selecting, placing, and training employees. The "organizational" part is concerned with the social and psychological aspects of work, including employee attitudes, behavior, emotions, health, motivation, leadership, and group dynamics. Both real-world applications and research will be emphasized throughout the course.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Define what it means to be an I/O Psychologist in terms of the two major subfields (industrial/organizational).	5. Apply psychological content and skills to career goals. N/A
2. Explain how theory and research are applied to work settings	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems. CSC 8. Apply scientific reasoning
3. Summarize the history and major perspectives underlying and driving the field of I/O psychology	
4. Evaluate the processes of recruitment, selection and evaluation of personnel a. state the rules and principles governing fair employment practices b. explain the uses and misuses of psychological testing in the selection process c. state the types of training d. characterize the types of performance evaluation	3. Describe the application of ethical standards to evaluate psychological science CSC 9. Evaluate ethical aspects of decision making
5. Identify the process of job analysis. a. Describe the uses of job performance criteria. b. Differentiate between person-oriented and job-oriented job analyses and the methods that are used for each.	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems. CSC 8. Apply scientific reasoning
6. Explain the potential I/O psychology has for society and organizations now and in the future.	

PSY145 - Human Growth & Development

Overview

Course Description

Overview of development throughout the entire life cycle. Developmental themes that emerge in and across different stages of life, including physical cognitive, social and emotional factors are surveyed. The role of heredity, culture, personal experience and the environment are discussed.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

PSY140 Introduction to Psychology

Learning Objectives

Learning Objectives

1. Describe the biological, genetic, evolutionary, cognitive, social, and emotional factors in lifespan developmental stages.

2. Demonstrate a working knowledge of major theoretical perspectives of life span development as it applies to lifespan developmental stages.
3. Analyze and evaluate lifespan development research according to contemporary trends and diversity.
4. Apply lifespan developmental research to personal and practical life settings.

PSY209 - Reading & Writing Research

Overview

Course Description
In most social science professions it is important to identify, read, evaluate and write about research studies. This course provides students a foundation for reviewing, reading and writing about research. Using library and internet resources, students will formulate a research strategy, develop search skills, evaluate sources, and prepare an annotated bibliography for their research method literature review.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
PSY106 Writing in APA Style

Corequisites
PSY255 Intro to Statistical Analysis

Advisement Comments
This course should be taken with the courses in the third semester of the program, specifically with PSY 255 as the student will be preparing a bibliography to use in the PSY 256 course.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Formulate a research strategy to find information about current research.	Program Objective 2 CSC 6
2. Find materials using the library and internet sources.	CSC 6
3. Evaluate information sources for accuracy, authority, objectivity, purpose, and appropriateness.	Program Objective 2
4. Read, synthesize and write in APA documentation styles	Program Objective 2 and 4

PSY240 - Educational Psychology

Overview

Course Description
This course examines the human development and learning theories as they apply to teaching and the learning process. The course focuses on the classroom application of psychological theories and research in the areas of human development, psychosocial influences, learning, motivation, educational environment, and assessments.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
PSY140 Introduction to Psychology

Learning Objectives

Learning Objectives

- discuss human development theories, learning theories, motivation, and assessment.
- demonstrate psychological learning principles and theories and human development theories as related to classroom teaching.
- describe how human development is influenced by learning, personal and social experiences, diversity, and maturation
- analyze and evaluate the current theories and research of the learning process and the application of these theories and research within the classroom environment

PSY242 - Child Development

Overview

Course Description
In this course we will explore the many dimensions of development of children from conception through middle childhood within the context of the family and culture. The physical, cognitive, emotional and social aspects of development are studied. There is an emphasis on prevailing theories and recent research and a major thrust on understanding how that impacts the child in the family, school and community. The impact of family and child rearing beliefs, gender issues, and language development are discussed as they relate to developmentally based practices.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
PSY140 Introduction to Psychology

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate an understanding of the scientific method as it applies to the interdisciplinary study of child development.	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach in solving problems. 8. Apply scientific reasoning.
2. Demonstrate a working knowledge of major theorists and researchers and relate that information to practice.	1. Describe and apply psychological principles.
3. Evaluate and analyze information concerning child development obtained from contemporary research, the general public, and the media.	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach in solving problems. 7. Analyze human diversity.
4. Articulate practical application of child development to maximize the children's development in the family, the school and the community.	7. Analyze human diversity.

PSY243 - Psychopathology

Overview

Course Description

This course offers an introduction to the study of psychopathology in human behavior. Using the biopsychosocial theoretical approach, students will examine the characteristics, etiology, and treatment of the major categories of disorders listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM). This course will also address the research methodologies used in studying these disorders and their treatment, as well as the legal and ethical issues in understanding and treating psychopathology.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

PSY140 Introduction to Psychology

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
1. Describe the major perspectives in the study of psychopathology and psychological disorders.	#1	#7-Analyze human diversity
2. Demonstrate a working knowledge of the major categories of psychopathology and psychological disorders; characteristics, etiology, and treatment.	#2	#7-Analyze human diversity
3. Demonstrate an appreciation of the ethical issues related to the diagnosis and treatment of psychopathology and psychological disorders.		

PSY250 - Cognitive Psychology

Overview

Course Description

This course is designed to provide a general understanding into the main area of cognitive psychology including but not limited to: memory, attention, language, knowledge, creativity, and problem solving. It will explore the functional and relevant aspects of the main areas of cognitive psychology, along with their histories. The course will also examine how Cognitive Psychologists employ the scientific method when conducting empirical cognitive-based research. This exploration will allow students to compare and contrast the validity of various cognitive theories. This course will also explore the biological basis of behavior and mental processes as related to cognition. Further, the course will describe the main processes that serve as the foundations of consciousness as well as how these processes relate to a neurological basis for awareness, decision making and behavior.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

PSY140 Introduction to Psychology

Learning Objectives

Learning Objectives

1. identify and critique the limitations of the main theoretical perspectives of the past century of experimental psychological research in human cognition.
2. apply the principles of scientific thinking to the investigation of human cognition.
3. describe and discuss areas of cognitive psychology such as memory, consciousness, perception, and language.
4. discover the personal relevance of course material, including an understanding of the various aspects of memory formation and retrieval as well as cognitive decision and problem solving methods

PSY255 - Intro to Statistical Analysis

Overview

Course Description

Introduces the student to the concepts of descriptive and inferential statistics. Research needs to be summarized by appropriate descriptive statistics such as central tendency, variability, and distributions. Relationships will be studied using correlation, regression, chi-square, and other non-parametric tests. Research also needs to be analyzed by appropriate inferential statistics such as t-tests and analysis of variance (ANOVA). Hypothesis testing, sampling, significance levels, type I errors, type II errors, confidence intervals, and power will be discussed. The student will be introduced to SPSS and/or other appropriate software for performing the descriptive and inferential statistical procedures presented in the course. The approach will be on practical considerations not theoretical issues.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

PSY140 Introduction to Psychology, MAT105 Intermediate Algebra

Corequisites

PSY209 Reading & Writing Research

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify the basic statistics involved in the psychological research	3. Describe the application of ethical standards to evaluate psychological science 1.Think critically
2. Identify, organize, and define the terms, concepts, and principles of research designs and appropriate statistical analyses	1. Describe and apply psychological principles 8.Apply scientific reasoning
3. Compute and present various descriptive statistics	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems 3. Apply quantitative reasoning
4. Compute and present various inferential statistics	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems 3. Apply quantitative reasoning
5. Compute and present various correlational statistics	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems 3. Apply quantitative reasoning
6. Compute and present various non-parametric statistics.	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems 3. Apply quantitative reasoning
7. Use the critical value tables for significance	2. Demonstrate critical thinking, skeptical inquiry, and apply the scientific approach to solving problems 3.Apply quantitative reasoning
8. Use SPSS and/or other statistical software to create graphical representations of data	4. Communicate effectively in a variety of forms. 5.Use current technology effectively

PSY255L - Intro Statistical Analysis Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
3

PSY256 - Research Methods in Psychology

Overview

Course Description

Introduces students to the philosophy of science and to the strategies of scientific inquiry, and to the skills involved in understanding, analyzing, and conducting psychological research. The course will cover a range of quantitative and qualitative methods including experiments, field studies, naturalistic observation, participant observation, surveys and polls, case studies, unobtrusive measurement, historical and descriptive research, program evaluation, meta-analysis, and quasi-experimental approaches. The course will consider research issues such as ethics, sampling, control, measurement, methodological constraints, and the presentation of a completed study.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

PSY140 Introduction to Psychology, PSY255 Intro to Statistical Analysis

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Identify the appropriate use of the various types of research designs.	
2. Review the primary literature.	
3. Develop a research idea.	
4. Design and execute a research plan.	
5. Analyze the research results.	
6. Draw conclusions from the findings.	
7. Present the results and interpretation.	

PSY256L - Research Meth in Psych Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:

0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
3

PSY260 - Independent Study-Psychology

Overview

Course Description
Reading, research, and/or experimentation on topic (not otherwise covered in college social sciences curriculum) selected in consultation with a faculty member. Special attention is to be given to the particular abilities and interest of students, with individual guidance for advanced studies. The student may choose: research on selected problems, supervised field studies, reading program, among other alternatives. The course maybe a group of students as well as individual study. The course may be repeated for credit. The student is responsible to adhere to the college policies and procedures for independent study.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Advisement Comments
Prerequisite(s): Introductory course in the subject area, minimum GPA of 3.0 in the course subject to be studied, and overall GPA of 3.0, or sufficient evidence of academic strength, and written permission of the instructor and academic dean to justify the independent study.

Learning Objectives

Learning Objectives
The nature of the course is by definition highly variable. Thus specific behavioral objectives are part of student(s) agreement with the cooperating faculty member. The generic behavioral objectives which are expected include:

1. Student(s) should demonstrate ability to state a problem and rationale for wanting to investigate the particular problem.
2. Student(s) should demonstrate initiative, ability to follow through, and thoroughness of literature research and/or reading.
3. Student(s) should demonstrate

- appropriateness of research design
- completeness of reading list
- correctness of a field study approach and method

1. Student(s) should demonstrate a collegiate presentation of results, findings, ideas, and conclusions.

PSY283 - Intro to Social Psychology

Overview

Course Description
Offers a broad introduction to social psychology, the scientific study of human social influence and interaction. The various ways people think about, effect, and relate to one another will be a major emphasis. Topics within socail cognition, social perception and social influence include social self-concept, social judgment, attitudes, persuasion, psychology explanations for social influence and interaction. Research methodologies commonly used to in the discipline will be emphasized through empirical findings.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
PSY140 Introduction to Psychology, SOC150 Introduction to Sociology

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Demonstrate knowledge of the scientific methodology used in social psychology	#8-Apply Scientific Reasoning
2. Identify, describe and evaluate basic concepts and ideas in understanding self, social cognition, social perception, and social influence.	#7-Analyze Human Diversity
3. Explain how knowledge of human diversity can provide a broader understanding of social psychology concepts.	#7-Analyze Human Diversity

RCP110 - Respiratory Care Equip I

Overview

Course Description
An introduction to basic respiratory care equipment and procedures. The course will begin with the study of the properties, storage, transportation, manufacture, and regulating devices of medical gases. Emphasis will be placed on humidity therapy, oxygen administration, and aerosol therapy including the equipment for each and their rationale for use, proper administration, theories of operation, and maintenance. Aerosol therapy modalities for the adult pediatric, and neonatal patient will be covered.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

RCP140 - Respiratory Care Equip II

Overview

Course Description

Introduces the student to more advanced respiratory care equipment and procedures. Begins with the study of the anatomy of the respiratory system as a foundation to the theoretical concepts and practical skills related to the care of the airway. Topics include anatomy of the lung; aerosol drug administration; chest physiotherapy; chest auscultation; secretion management; the insertion, management, and removal of artificial airways; suctioning procedures; management of post-operative atelectasis; and manual resuscitators. In addition, the student will become familiar with cleaning and sterilization of respiratory care equipment.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

RCP210 - Mechanical Ventilation

Overview

Course Description

Designed to develop in the student an in-depth knowledge of Hyperinflation Therapy (IPPB), pressure ventilation, and volume ventilation. The student will be taught with the goal of developing an understanding of each ventilator's: 1) classification, 2) controls, 3) internal and external circuitry, 4) function, 5) pretesting techniques, 6) monitoring techniques, and 7) troubleshooting techniques. Emphasis is placed on creating the students ability to apply this knowledge to any ventilator which will be encountered in the clinical setting. Also covered will be the concepts of ventilator management including the institution, maintenance, and termination of continuous ventilatory support.

Total Credits

Total Credit Hours:

4

Billing Hours

Billing Hours Min:

4

Lecture Hours

Lecture Hours (per week):

3

RCP210L - Mechanical Ventilation Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):
3

RES110 - Real Estate Law

Overview

Course Description
Provides a basic knowledge of real estate law. Decisions in court cases, state and national law concerning various legal aspects of the exchange of real estate are studied. A student must attend 80% of the class for the course to be used as credit to sit for the State Licensing Examination.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain the purpose and legal implications of a survey and the legal description of a property.		1, 2
Describe the elements of a deed and the different types of deeds.		1
Analyze different types of encumbrances including easements, liens, and licenses.		1
Explain the details of a real estate closing including the purpose of title insurance.		1

RSS099 - Basic Skills Reading

Overview

Course Description
This course is designed to develop and strengthen the reading comprehension of students who intend to pursue a college program of study, but who need serious and sustained remediation of their reading for more than one semester in order to prepare for the demands of reading-based college courses. Students are required to keep appointments with reading lab instructors. Students may be required to complete reading lab assignments.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Entry Level

Learning Objectives

Learning Objectives
The primary objective of this course is to prepare the college student for RSS 100 through the introduction to reading comprehension and vocabulary development strategies that will serve as the foundation of successful college reading in the future. At the conclusion of the course the student must demonstrate competence at a "c" level or higher in the following:

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Utilize prereading strategies for determining the overall purpose, general structure and main ideas of a reading passage.	
2. Demonstrate through written tests and assignments as well as in-class activities and discussions the comprehension and clear expression of main ideas in individual paragraphs and in multi-paragraph reading passages.	
3. Demonstrate through index card assignment and periodic tests the receptive and expressive acquisition of no fewer than 300 new words.	
4. Demonstrate the consistently successful use of context clues in determining word meanings.	
5. Apply inferential reasoning to understand implied meaning.	
6. Draw conclusions beyond those directly stated by the author.	
7. Detect dominant thought patterns in single paragraphs and multi-paragraphed passages.	
8. Detect emotional tone at introductory level.	
9. Make and support judgments about a text.	
10. Apply SQ3R and PRESP to introductory college texts.	
11. Demonstrate comprehension of simple metaphoric expressions in a variety of reading materials, such as relatively easy short stories and poetry.	
12. Respond on a personal level to the content of reading.	
13. Demonstrate competence in word part analysis.	
14. Develop metacognitive awareness of the reading process.	
15. Develop appreciation of reading as a function of active imagination.	
16. Successfully complete 28 journal entries, two book critiques and 300 vocabulary cards.	

RSS100 - Critical Reading

Overview

Course Description
Designed to increase effectiveness in college reading and related study activities. Special attention is given to improving comprehension of a wide variety of college-level reading materials through critical reading and metaphoric thinking.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Entry Level

Learning Objectives

Learning Objectives
The overall objective of this course is to equip the student with active reading strategies that will enable him or her to effectively and efficiently comprehend college level reading material.

At the conclusion of the course the student should be able to successfully and consistently demonstrate the following competencies in application to college level reading material:

1. Demonstrate prereading for main idea and critical prereading
2. Apply SQ3R and PRESP to the studying of college textbook chapters
3. Comprehend and express the main idea of both long and short passages
4. Demonstrate through written tests and index card assignment the receptive and expressive acquisition of no fewer than 210 new words
5. Detect flaws and weaknesses in printed arguments (logical fallacies, bogus claims, insubstantial evidence, loaded terms, misrepresentation)
6. Identify sound argumentative strategy and design (sound logic, substantial and documented evidence, honesty, inclusion of counterarguments) in printed arguments
7. Infer messages intentionally implied by the author
8. Draw conclusions beyond the text
9. Detect emotionally toned words and images in texts representing a wide range of genres
10. Comprehend metaphoric expressions in poetry, short fiction as well as in essays, textbook material and other expository text
11. Apply metaphoric thinking to intertextual and cross-genre reading
12. Identify elements of both classical and Rogerian arguments in argumentative essays
13. Develop metacognitive awareness of the reading process
14. Successfully complete 28 journal entries
15. Successfully complete two book critiques
16. Successfully complete 210 vocabulary cards

17. Apply critical reading strategies to intertextual reading of two or more texts of the same genre

18. Apply critical intertextual reading strategies to two or more texts of mixed genres (e.g. a short story and an essay)

19. Apply rapid reading strategies Skimming and Scanning

20. Improve reading flexibility and increase reading speed

21. Develop appreciation of reading as a function of the reader's active imagination

22. Apply TCDR critical reading strategy to content area textbooks

RSS101 - Effective Study Skills

Overview

Course Description
Designed to teach effective study skills. Topics include adjusting to college, listening and note taking, time management, reading and marking a textbook, test taking, and effective study habits. Skills will be taught utilizing content course materials. The course is especially appropriate for returning adults and for students who wish to strengthen study skills.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
Upon successful completion of this course, the student will be able to demonstrate competence in each of the following areas:

1. Take thorough, well-organized lecture notes using all of the strategies of the Cornell notetaking system.

2. Effectively manage his or her time through the integrated use of assignment notebooks, semester calendars, weekly time plans and daily “to do” lists.

3. Apply the SQ4R study system to narrative texts.

4. Apply the PRESP study system to math-based texts.

5. Create mind maps, hierarchies and time lines from textbook and lecture material.

6. Apply test-taking and test preparation study strategies to both objective and essay style tests.

7. Demonstrate through written tests a knowledge of memory theory and memory enhancement devices.

8. Determine and prioritize long-term and short-term goals.

9. Demonstrate through written tests an understanding of the effectiveness of using a multisensory approach (VAKT) to learning as well as other relevant learning styles applications.

10. Locate the LAL, ARC, and related labs and services.

11. Demonstrate through written tests an understanding of stress management techniques and strategies.

12. Demonstrate through written tests an understanding of motivation strategies.

RSS102 - College Experience

Overview

Course Description
This course is designed to establish a connection between students and LCCC's campus and resources. Topics will include self-awareness, goal setting, organization and time management, academic planning, library orientation, student life, diversity and wellness.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Learning Objectives

Learning Objectives
Students taking this course are expected to demonstrate the following competencies:

The student will:

1 Identify learning styles and personality types of oneself and others.

2. Explore campus resources and services.

3. Apply organization and time management skills to academic, professional, and personal goals.

4. Become aware of their role as active and responsible partners in their own education.

5. Develop ability to conduct a simple search using materials, services, and resources available through the LCCC library.

6. Explore student life opportunities and personal leadership skills and the importance of becoming involved in campus life.

7. Engage in oral and written exchanges of information related to diversity, relationships, and interpersonal communication.

8. Identify factors involved in developing health, wellness, and stress management.

RSS103 - Vocabulary Improvement

Overview

Course Description
Designed to increase vocabulary so that a student may function independently in college courses. Because of the positive correlation between a powerful vocabulary and academic success, students will be given the opportunity to increase their vocabulary through dictionary work, Thesaurus exercises, analogies, and contextual and etymological studies. Attention will be given to learning words through word structure and to the development of a technical vocabulary. Memory strategies will be included.

Total Credits

Total Credit Hours:
1

Billing Hours ⓘ

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Exploit basic and advanced uses of the dictionary to more fully understand new words
2. Derive word meanings through context clues
3. Apply knowledge of word part analysis to understanding new words
4. Apply etymological information to understand word meanings
5. Utilize 125 new words in both receptive and expressive modes

RSS104 - Student Success

Overview

Course Description
Designed to enhance student success by providing an opportunity for students to learn and adopt methods that promote effectiveness in academic and non-academic pursuits. Academic survival skills such as notetaking, listening, textbook study strategies, time management, concentration, motivation and test-taking will be taught with an emphasis on their application to course work in other disciplines. In addition, the course promotes development of life management skills such as stress management, leadership, effective communication, and career planning.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

1. Academic Study Skills

The student will be able to do the following:

a. Take lecture notes using all of the strategies of the Cornell system

b. Manage his/her time through the integrated use of assignment lists, semester calendars, weekly time plans and daily "to do" schedules.

c. Apply the SQ3R study system to narrative texts

d. Apply the PRESP study system to math-based texts

e. Create mind maps, hierarchies and time lines from textbook and lecture material

f. Demonstrate through class performance and written tests a knowledge of effective listening strategies for more effective performance in lecture style classes

g. Apply test-taking and test preparation strategies to both objective and essay style tests

h. Demonstrate through written tests a knowledge of memory theory and memory enhancement devices

i. Apply Maslow's "Hierarchy of Needs" theory and the Rotter's "Locus of Control" model to solving motivation problems

j. Determine and prioritize short-term and long-term goals

k. Improve concentration both in and out of the classroom

l. Demonstrate through written tests an understanding of the effectiveness of using a multisensory approach to learning

m. Locate the LAL, the ARC, and related labs and services

2. Stress Management and Personal Health

The student will be able to do the following:

a. Manage stress using a variety of stress prevention and stress curtailing mental and physical techniques and strategies

b. Develop a personal plan for managing stress

c. Avoid sexually transmitted diseases

d. Avoid alcoholism and drug addiction or know where and how to seek help in combating them

3. Research Skills

The student will be able to do the following:

a. Using the colleges electronic index services and the internet, search, locate and print information from professional journals about college and career

b. Apply critical thinking in written reactions to the content of articles from professional journals or trade magazines

4. Interpersonal Relationships

The student will be able to do the following:

a. Demonstrate through written tests an understanding of verbal and non-verbal transmission of messages

b. Demonstrate through written tests an understanding of the sender-receiver-feedback model of interpersonal communication

c. Demonstrate through written tests an understanding of the art of negotiating in terms of win-lose, lose-lose and win-win strategies

d. Demonstrate through written tests an understanding of ten common barriers to good communication

e. Demonstrate through written tests an understanding of the relative superiority of assertiveness over aggression and non-assertiveness in the context of interpersonal interaction through written tests an understanding of verbal and non-verbal listening strategies

f. Explain the benefits of using I-messages as opposed to You-messages as a tool for preventing and resolving conflicts

g. Demonstrate through written tests an understanding of ten common tips for avoiding and resolving conflicts

h. Demonstrate through written tests an understanding of loneliness and how to handle it

i. Demonstrate through written tests an understanding of sexual harassment issues and date rape, how to prevent them as well as why and how to report them if they happen

j. Demonstrate through written tests an understanding of the harmful effects of racism, sexism, ageism, ethnocentrism and other social prejudices

5. Career Planning

The student will be able to do the following:

a. Utilize LCCC's career planning services

b. Map either a four to five year academic plan or a two to three year academic plan in light of career goals

c. Demonstrate knowledge of effective job hunting strategies

d. Apply improved understanding of personal interests, skills, aptitudes, personality, goals and values to effective career decision making

e. Apply the Holland personality hexagram to career decision making

f. Critically analyze the value of results of the Myers-Briggs test for career decision making

g. Demonstrate five stages in career decision-making loop

h. Utilize career planning resources, such as *The Dictionary of Occupational Titles (DOT)*, *The Occupational Outlook Handbook (OOH)*, and the various computer programs, such as *Discover*

i. Make and keep an appointment with an academic advisor and demonstrate through written tests an understanding of the value of academic advisement beyond selecting a course schedule

j. Write an effective cover letter and resume

k. Demonstrate through written tests and a work site interview an understanding of situational leadership models in light of conflict resolution and job choices

l. Plan, schedule and execute an informational interview as part of a work site visit to a local place of employment

RSS106 - Math Study Skills

Overview

Course Description
Designed to provide effective study strategies to improve the student's learning experiences in math. Lessons focus on the development by the student of an individual, unique system of math study skills that can be used from one math course to the next. In addition, students will explore the development of the necessary affective characteristics of successful math students; more specifically, strategies and tools to overcome math or test anxiety and to acquire a stronger, more positive self perception as capable students.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
2

Learning Objectives

Learning Objectives

1. Explain at least five ways in which learning math is different than learning other subjects and be able to list one math learning strategy for each of these five ways.

2. Explain strengths and weaknesses in his/her math study habits.
3. Explain the memory process.
4. Describe, in writing, his/her learning styles and three strategies for learning math, based on his/her learning styles.
5. Define test anxiety and math anxiety, and explain possible reasons that students have acquired these anxieties.
6. Describe four ways to help control anxiety before a math test.
7. Demonstrate knowledge of the major concepts of time management and systematic studying of math.
8. Describe strategies to improve his/her listening and note taking skills in math class.
9. Outline a step by step process for reading his/her math textbook.
10. Describe strategies to improve math test taking skills.

RSS201 - Adult Literacy Tutor Training

Overview

Course Description

Designed to provide literacy tutors with training in the More than 20% of residents in the Carbon County Area do not areas of instructional methods, diagnosis, materials have a high school diploma. This special state-funded grant allows studenst to earn three college credits while learning to be adult literacy tutors. Students will support literacy participants in helping their children with school work, preparing for teacher conferences, completing job applications, studying for employment tests, and earning their GED. Adult Literacy Tutor Training will include 40 hours of "hands-on" experiance with individuals and in classroom training. Enrollment is limited; register early. selection, record keeping, and lesson planning, as well as teaching students with special needs such as ESL, learning disabilities, Adult Basic Education, and GED preparation. In addition, course participants are required to apply their newly acquired skills through supervised literacy tutoring (4 hours per week). All applicants will be interviewed prior to registration. For additional information, call 610-799-1940

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Assist literacy students in establishing goals
2. Use a variety of informal diagnostic tools
3. Interpret standard literacy testing instruments, such as the TABE
4. Make referrals to appropriate support agencies and personnel
5. Provide basic instruction to literacy students with a wide variety of backgrounds and needs, including native speakers of English, ESL students, workers and students with learning disabilities
6. Use a wide variety of instructional materials, including newspapers, literature, folklore, work-related materials, and other real-life materials that match student goals
7. Evaluate student progress
8. Exhibit confidence in teaching
9. Understand and use specialized language of adult literacy, such as ESL, total physical response, language experience approach, readability study, VAKT, grade level Equivalency, TABE, ABLE, IRI, whole language, etc.
10. Demonstrate proficiency in using an eclectic approach that incorporates “whole language” and, when appropriate, a more traditional linguistic approach to acquisition of language skills
11. Demonstrate an understanding of how to apply the methods of Paulo Freire in the initiation, design and implementation of worker literacy program

12. Complete 40 hours of hands- on experience promoting adult literacy, especially through preparing and executing literacy instruction to matched clients outside of class.

RSS297 - Team Building

Overview

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
1

SCI105 - Integrated Science

Overview

Course Description
This non-major course brings together important concepts from several scientific fields, including astronomy, biology, chemistry, and physics, and provides a basis for understanding how our physical world works. Topics range from the atomic structure of matter, physical laws, and the structure of the universe, to cell theory, the enviroment, and evolution.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Lab Hours

Lab Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level, Math Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify how Science asks and answers questions about the natural universe.		8
Collect, analyze, and interpret quantitative and qualitative data.		3, 8
Summarize basic physical laws.		
Describe the chemical and physical basis of life.		
Describe the scientific explanation for continuity and diversity of life.		1
Discuss the sources of energy and the movement of energy in a system.		1
Explain current theories about the origin and development of the universe.		3, 8
Contrast small and large scale physical changes in the Earth.		

SCI105L - Integrated Science Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

SDS017 - Summer Bridge

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lecture Hours

Lecture Hours (per week):
0

Lab Hours

Lab Hours (per week):
0

Other Hours

Other Total Hours:
0

SDS102 - Honors Scholars Experience

Overview

Course Description
Designed to orient Honors Scholar students to LCCC and to the Honors Scholars Program. In addition to topics such as self-awareness, time management, student engagement, and diversity, special emphasis will be placed on prioritizing short-term and long-term goals, creating a two-year academic plan including transfer options, and developing an e-portfolio.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Learning Objectives

Learning Objectives
1. Explore how different learning styles, personality types, and motivational strategies impact the educational process.
2. Explore campus resources and services.
3. Apply organization and time management skills to academic, professional, and personal goals.
4. Become active and responsible partners in their own education and academic planning.
5. Explore research databases available through the LCCC library and identify credible and scholarly sources.
6. Explore student life opportunities and personal leadership skills and the importance of becoming involved in campus life.
7. Determine and prioritize long-term and short-term goals, including a two-year academic plan.
8. Engage in oral and written exchanges of information related to diversity, relationships, and interpersonal communication.
9. Develop an e-portfolio for use in focusing decision making skills and applying to transfer schools or future employment.
10. Strategize for the successful completion of the Honors Scholars Program.

SDS103 - Mindfulness for Acad. Success

Overview

Course Description
This course is a set of ten lessons, each teaching a distinct mindfulness skill, and designed to do so in a way which engages students. This course is designed to support academic success and is not therapeutic in nature. Use of visuals, film and sound images, and practical exercises and demonstrations make the ideas vivid and relevant to students' lives. Some objectives of this course include; experiencing a greater well-being, to improve concentration and focus, and to learn basic skills to cope with the everyday stress.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
This course is designed to support academic success and is not therapeutic in nature.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. To introduce mindfulness & the college environment in a way that is engaging and entertaining.	N/A
2. To practice mindfulness techniques to enhance learning and foster an environment of student success.	N/A
3. To identify useful tools & demonstrate what areas of their life they apply these skills.	#1-Think critically
4. To cultivate an awareness of diverse experiences and perspectives.	#7-Analyze human diversity

SDS104 - Major Decisions

Overview

Course Description
This course is designed to help students improve decision making skills as well as to help them make a preliminary major and/or career choice based on information learned about themselves and the world of work. Students will learn about factors influencing their career choices, such as personal values, economic needs, transferability of skills, and the importance of life-long learning. Also, students will gain a deeper understanding of themselves through the use of several personality and career assessment tools.

Total Credits

Total Credit Hours:
1

Billing Hours ◈

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Learning Objectives

Learning Objectives

1. Encourage self-assessment and self-awareness by identifying individual personality type and career profile.
2. Develop skills in goal setting and decision making.
3. Explore one's beliefs, values, and attitudes as related to career choice.
4. Identify existing strengths as well as growth areas.
5. Be able to identify possible majors and recognize connections between those majors and career options.
6. Determine and prioritize long-term and short-term goals.
7. Understand career exploration as an ever changing and lifelong process.
8. Increase student use of college resources and services (i.e. counseling, Career Services, Library services)

SDS105 - Health Science Careers

Overview

Course Description

This course introduces the student to career options in the health care industry. Emphasized are basic concepts related to any health science career, as well as educational and credentialing requirements. Students will learn about factors influencing their career choices, such as personal values, eceonomic needs, trasferability of skills, and the importance of life-long learning. Also, students will gain a deeper understanding of themselves through the use of several personality and career assessment tools. Introduction to a career in health science will be obtained through information interviews, job shadowing, and research project. Transfer options will be explored through research, college visits, and transfer fairs. Class discussions & presentations will introduce the student to the concepts of critical thinking.

Total Credits

Total Credit Hours:

1

Billing Hours ⓘ

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Describe a minimum of ten different health science industry careers including scope of practice, role responsibilities, educational requirements, and employment opportunities.	#6 - Apply information literacy skills
2. Encourage self-assessment and self-awareness by identifying individual personality type and career profile.	
3. Develop skills in goal setting and decision making.	
4. Explore one's beliefs, values, and attitudes as related to career choice.	
5. Be able to identify possible 4 year health science related majors and recognize connections between those majors and career options.	
6. Determine and prioritize long-term and short-term educational and career goals.	

SDS106 - Liberal Arts First Year Seminar

Overview

Course Description

This course will prepare LIberal Arts and General Studies majors for success at LCCC. In addition to topics shared among all FYE seminars, this seminar will emphasize developing an understanding of what it means to be an educated person, the value of a LIberal Arts education, and the essentiality of being an informed citizen in a democracy.

Total Credits

Total Credit Hours:

1

Billing Hours ⓘ

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGE-WIDE STUDENT COMPETENCY
1. Understand and articulate the purpose and value of the Liberal Arts	Thinking Critically
2. Articulate, demonstrate and apply intellectual and time management skills	Thinking Critically
3. Identify and utilize appropriate campus resources, service and leadership opportunities	N/A
4. Explore and demonstrate an understanding of oneself, one's interests and future goals	N/A
5. Evaluate issues of living in a diverse society and articulate how these shape perspectives and relationships	Analyze Human Diversity

SDS109 - ASPIRA First Year Experience

Overview

Course Description

This is a comprehensive course designed to help students learn how to navigate college, succeed in academics, and identify personal and career goals. Cultural topics such as Latinx identity, community, and leadership will also be explored in the course. Guided journaling will be used throughout the semester to provide space for reflection and application of course concepts. The community that is fostered in Aspira will help students make a successful transition to college, identify and achieve goals, feel a sense of belonging at the college, and ultimately help make LCCC a better place.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

SDS110 - Intro to Assoc. Degree Nursing

Overview

Course Description

This course introduces the student to career options in the field of nursing. Emphasized are basic concepts related to a career in nursing, as well as the academic rigor, accreditation processes and expectations as well as the licensure requirements. Students will learn about factors influencing their career choices, such as personal and professional ethics, values, economic needs, transferability of skills, and the importance of life-long learning. Also, students will gain a deeper understanding of the differentiating rules, requirements, and processes as related specifically to the nursing major. Introduction to a career in nursing will be discussed throughout this course, with weekly required objectives to ensure preparation to begin the nursing program and meet all clinical site requirements prior to the start of ADN 150. Class discussions & presentations will introduce the student to the concepts clinical judgement of critical thinking.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Requirements

Prerequisites

BIO163 Anatomy & Physiology I, BIO164 Anatomy & Physiology II, ENG105 Research and Composition, MAT121 Mathematics for Allied Health, PSY140 Introduction to Psychology

Corequisites

BIO220 Introduction to Microbiology, ENG106 Introduction to Literature, PSY145 Human Growth & Development, SOC150 Introduction to Sociology

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Introduce the application of information gained in the biological, social, and behavioral sciences required for the nursing program.	1	1,2,8
Describe the requirements of the nursing program as outlined in the nursing handbook.	2	1,3,5,6,8
Discuss the various agencies that ensure compliance in areas of accreditation namely, ACEN, SBON, LCCC and clinical requirements are met.	3	1,5,6,8
Apply a variety of verbal and nonverbal therapeutic communication skills at all times both in and outside of the classroom setting	4	1,2,7
Provide inter-professional, socially responsible, environmentally sound, and culturally/spiritually sensitive collaboration to diverse populations within the classroom and college setting.	5	1,3,6,7
Demonstrate accountability, advocacy and professionalism within the framework of legal and ethical standards required by the nursing program.	6	1,5,7,9
Integrate advanced theoretical knowledge and clinical skills to develop attitudes, values, and personal qualities that reflect the expected standards of the student nurse	7	1,2,4,6,9

SDS111 - Intro LPN to Assoc. Deg. Nurs.

Overview

Course Description

This course introduces the student to career options in the field of nursing. Emphasized are basic concepts related to a career in nursing, as well as the academic rigor, accreditation processes and expectations as well as the licensure requirements. Students will learn about factors influencing their career choices, such as personal and professional ethics, values, economic needs, transferability of skills, and the importance of life-long learning. Also, student will gain a deeper understanding of the differentiating rules, requirements, and processes as related specifically to the nursing major. Introduction to a career in nursing will be discussed throughout this course, with weekly required objectives to ensure preparation to begin the nursing program and meet all clinical site requirements prior to the start of ADN 173. Class Discussions & presentations will introduce the student to the concepts clinical judgement of critical thinking.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
BIO163 Anatomy & Physiology I, BIO164 Anatomy & Physiology II, ENG105 Research and Composition, MAT121 Mathematics for Allied Health, PSY140 Introduction to Psychology

Corequisites
BIO220 Introduction to Microbiology, ENG106 Introduction to Literature, PSY145 Human Growth & Development, SOC150 Introduction to Sociology

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Introduce the application of information gained in the biological, social, and behavioral sciences required for the nursing program.	1	1,2,8
Describe the requirements of the nursing program as outlined in the nursing handbook.	2	1,3,5,6,8
Discuss the various agencies that ensure compliance in areas of accreditation namely, ACEN, SBON, LCCC and clinical requirements are met.	3	1,5,6,8
Apply a variety of verbal and nonverbal therapeutic communication skills at all times both in and outside of the classroom setting.	4	1,2,7
Provide inter-professional, socially responsible, environmentally sound, and culturally/spiritually sensitive collaboration to diverse populations within the classroom and college setting.	5	1,3,6,7
Demonstrate accountability, advocacy and professionalism within the framework of legal and ethical standards required by the nursing program.	6	1,5,7,9
Integrate advanced theoretical knowledge and clinical skills to develop attitudes, values, and personal qualities that reflect the expected standards of the student nurse	7	1,2,4,6,9

SDS112 - Intro to Practical Nursing

Overview

Course Description

This course introduces the student to career options in the field of nursing. Emphasized are basic concepts related to a career in nursing, as well as the academic rigor, accreditation processes and expectations as well as the licensure requirements. Student will learn about factors influencing their career choices, such as personal and professional ethics, values, economic needs, transferability of skills, and the importance of life-long learning. Also, students will gain a deeper understanding of the differentiating rules, requirements, and processes as related specifically to the nursing major. Introduction to a career in Practical Nursing will be discussed throughout this course, with weekly required objectives to ensure preparation to begin the nursing program and meet all clinical site requirements prior to the start of NUR 106. Class discussions & presentations will introduce the student to the concepts clinical judgement of critical thinking.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Requirements

Prerequisites

BIO163 Anatomy & Physiology I, PSY140 Introduction to Psychology, SOC150 Introduction to Sociology

Corequisites

BIO164 Anatomy & Physiology II, PSY145 Human Growth & Development

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Introduce the application of information gained in the biological, social, and behavioral sciences required for the nursing program.	1	1,2,8
Describe the requirements of the nursing program as outlined in the nursing handbook.	9	1,3,5,6,8
Discuss the various agencies that ensure compliance in areas of accreditation namely, ACEN, SBON, LCCC and clinical requirements are met.	7	1,5,6,8
Apply a variety of verbal and nonverbal therapeutic communication skills at all times both in and outside of the classroom setting	4	1,2,7
Provide inter-professional, socially responsible, environmentally sound, and culturally/spiritually sensitive collaboration to diverse populations within the classroom and college setting.	2	1,3,6,7
Demonstrate accountability, advocacy and professionalism within the framework of legal and ethical standards required by the nursing program.	7	1,5,7,9
Integrate advanced theoretical knowledge and clinical skills to develop attitudes, values, and personal qualities that reflect the expected standards of the student nurse	8	1,2,4,6,9

SDS150 - Workplace Readiness

Overview

Course Description

This course is designed for students that are learning about their career goals and are ready to prepare to enter the workforce. It will help to develop the knowledge and skills needed to take those first steps. Students will learn about topics ranging from workplace basics, job search and application skills up to interviewing. Throughout the course, students will receive applicable skills and templates for resumes and cover letters to use in their real-world job search.

Total Credits

Total Credit Hours:

2

Billing Hours

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

2

Other Hours

Other Total Hours:
30

Requirements

Advisement Comments
This class is recommended for students who already have an idea of their career path and would like to prepare to enter the workforce.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
State values and goals with relation to work	6	2
Identify potential jobs of interest		1
Compare and contrast different types of job experiences		6
Evaluate appropriate skills and etiquette in relation to job interviews	2	2
Discuss aspects of employment law	3	7
Build resumes appropriate to their chosen work	5	2
Draft paperwork necessary for gaining employment	2	1
Articulate skills and experience in a job interview	2	2
Utilize technology to search and apply for jobs	5	5
Format resumes and cover letters	2	2
Explore workplaces outside of the classroom setting	1	1

SDS151 - Work Culture Responsibilities

Overview

Course Description
This course is designed for students that are about to enter the workforce. It will help to develop the knowledge and skills needed to be successful in a new job. Students will learn about topics ranging from managing job responsibilities to communicating or resolving issues with supervisors and coworkers. Throughout the course, students will receive applicable skills and gain a deeper understanding of how they fit into the workforce and what will motivate them to be successful

Total Credits

Total Credit Hours:
2

Billing Hours ⓘ

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Other Hours

Other Total Hours:
35

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Implement strategies for prioritizing job responsibilities.	7	1
Identify when and how to ask for help.	2	1
Demonstrate job specific communication skills.	1	2
Demonstrate an understanding of their ideal work/life balance.	6	1
Evaluate and state self-motivating factors.		1
Demonstrate an understanding of workplace norms.	6	9
Apply communication techniques to effectively work in teams.	4	4
Apply methods of conflict resolution.	4	2
Relate the effects of employment law to their own lives.	6	1
Engage in work cultures through tangible experiences	1	1

SDS152 - Career Development

Overview

Course Description

This is designed for students that are looking to build on their education and work experience to advance their career. It will help to take their workplace skills and experience to further develop strategies in order to build the long-term career they want. Students will learn about topics ranging from general aspects of career advancement to their operating style and developing leadership skills. Throughout the course, students will receive applicable skills and learn techniques to chart industry specific career goals.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Other Hours

Other Total Hours:

40

Requirements

Advisement Comments

This class is recommended for students who are gaining experiences in their chosen career path and are looking to learn how to develop a long-term career in that field.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe their operating style.		6
Adapt oral and written communication to a targeted audience.	2	2
Collaborate with teams in a leadership role.	4	4
Establish tools for self-evaluation.	6	1
Identify aspects of career advancement.		6
Employ methods of setting and re-evaluating goals.	7	1
Apply techniques for networking.	2	2
State industry specific steps for career advancement.	1	1
Apply knowledge through tangible work experiences.	1	1

SDS297 - Spec Top:International Std Exp

Overview

Course Description

This course is not only an introduction to the US education system and importance of regional accreditation but also an introduction to LCCC and its services and campus resources. Taken in the first or second semester this course will assist students with their transition to college life both academically and extra-curricular. The course allows advisors to assist students in the exploration and planning of education and career goals. Students will learn to utilize the catalog, course schedule and other resources in determining and establishing an academic plan. Students will assess their academic goals and educational plans, making appropriate adjustments.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):

1

Learning Objectives

Learning Objectives

Students taking this course are expected to demonstrate the following competencies:

The student will:

• Understand how the US education works and regional accreditation and its importance

when choosing a transfer college.

• Identify LCCC Campus resources.

• Engage in oral and written exchanges of information related to students own cultural

background and differences and similarities in US culture and US classroom culture.

• Clarify personal values, especially as they relate to academic and career choices.

• Develop an educational plan for successfully achieving their goals and select courses

each semester to progress toward fulfilling that educational plan.

• Demonstrate the ability to make effective decisions concerning their degree and career

goals.

-2-

• Utilize the resources and services on campus to assist them in achieving their academic,

personal and career goals.

• Students will assess their academic goals and educational plans, making appropriate

adjustments.

• Students on visas will understand the importance of maintaining their status and

following federal guidelines with regards to their visa.

SDS297B - The Student Athlete Experience

Overview

Course Description
Designed to orient Student Athletes to LCCC and being a successful college athlete. In addition to topics such as self-awareness, time management, student engagement, and diveristy, special emphasis will be placed on prioritizing short-term and long-term goals, exploring career options and transfer options, as appropriate.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
Please communicate/follow up with Athletic Director on student's interest prior to student registration in the course.

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGE-WIDE COMPETENCIES
Explore how different learning styles, personality types, and motivational strategies impact the learning process.	Think Critically
Explore campus resources and services to become aware of and be able to find services when needed.	Think Critically
Apply organization and time management skills to academic, athletic, and personal goals.	Think Critically Communicate effectively
Become active and responsible partners in their own education and career planning. Prioritize short- and long- term goals including career exploration and two-year academic plan.	
Explore research databases available through the LCCC library and identify credible and scholarly sources.	Apply information literacy skills Use current technology effectively
Explore student life opportunities and personal leadership skills to develop a holistic approach to the educational experience.	Analyze human diversity Participate cooperatively with a team Evaluate ethical aspects of decision making
Strategize for the successful completion of academic goals and prepare for transfer as a student athlete or for the workforce.	Think critically

SDS297C - Workplace Readiness

Overview

Course Description

This course is designed for students to develop the knowledge and skills needed to navigate the employment cycle from start to finish. Students will learn job search skills, create job application materials and practice interview skills. Soft skills needed to maintain a job, such as professional etiquette, effective communication, customer service, self-direction and problem solving will also be practiced. Additionally, students will learn about healthy behaviors as they pertain to public vs. private spheres, harassment and work-life balance. Students will also become familiar with end of employment cycle topics such as common fireable offenses, how to leave a job and career management.

Total Credits

Total Credit Hours:

1

Billing Hours

Billing Hours Min:

1

Lecture Hours

Lecture Hours (per week):
1

Learning Objectives

Learning Objectives

Develop the ability to search and apply for a job
Gain the ability to create and refine a resume and cover letter.
Understand principles of effective communication
Understand the importance of self-direction and responsibility.
Develop customer service and problem-solving skills.
Refine the use of these skills to interact with diverse populations.
Understand career management as an ever changing and lifelong process
Apply information literacy skills through written assessments
Overview of employment and disability law
Increase student use of college resources and services.

SDS297D - Spec Top: ASPIRA First Yr. Exp

Overview

Course Description
This course will dive into a comprehensive course designed to help you with retention as well as how to navigate college, succeed in academics, and identify personal and career goals. We will also address issues about Latinx identity, community, and leadership. We will use guided journaling throughout the semester to explore your skills, desires. Being part of this community will help you identify and achieve your goals and help make LCCC a better place.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
FAQ
What is the ASPIRA First Year Experience?
-The ASPIRA first-year experience supports Latino/a/x students during the transition to college.
How do I participate?
-First-year Latino/a/x students at the college can enroll in a one-credit ASPIRA FREE First-Year Experience (FYE) seminar. Complete the interest form on the ASPIRA website or speak with your academic advisor directly.
What will the ASPIRA FYE seminar cover?
The ASPIRA seminar will discuss college success topics, such as:
• Accessing the resources you need to be a successful college student
• Time management
• Taking useful notes

• Studying for essay and multiple-choice tests
The course will also address specific topics of interest to Latino/a/x students, such as:
• Being a Latino/a/x college student
• Being a Latino/a/x in the United States
• Overcoming obstacles while completing your education
• Getting support from family, friends, and your community

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	COLLEGE-WIDE COMPETENCY
Describe individual strengths, skills, characteristics, and interests and relate personal, academic, and career goals.	
Define Latinx identity, community, and leadership goals.	
Identify and use college resources and services to help support personal and academic success.	
Utilize new study skills to comprehend, retain, and apply class content.	
Implement productive self-monitoring habits to make sound decisions about personal, career, and academic choices.	
Initiate engagement with peers, instructors, and the college community to build culturally diverse relationships that foster personal, academic, and career success.	7
Apply understanding of the rigorous expectations of college to achieve success.	

SDS297E - Men of Culture

Overview

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
This course is offered free of charge. The focus is building community for community college Men of Color, others are not excluded from participation, they should just know that masculinity and race will be the focus of the course. The course will be taught by an instructor and peer mentor.

Learning Objectives

Learning Objectives
1) Explore gendered and racialized identities, familial and community ties, and the role social forces play in shaping the identities of Men of Color.

2) Access Lehigh Carbon Community College (LCCC) resources and services to achieve personal, academic, and career success.

3) Collaborate with LCCC peers, faculty, and staff to foster a culturally engaging campus environment.

SED115 - Foundations of Special Ed

Overview

Course Description

This course focuses on developing a knowledge base around educational topics such as Inclusion, Response to Intervention (RtI), Positive Behavioral Intervention Supports (PBIS), school climate, and teamwork between paraprofessionals and professional staff. The student will examine the Council of Exceptional Children ethics and standards that are embraced by the field of special education and how this impacts the special education profession. The student will explore how belief systems can influence relationships with individuals with disabilities. In addition, the student will have opportunities to become aware of perspectives and attitudes toward individuals with disabilities and their family members. The course will also explore how perceptions and attitudes can impact the relationships with diverse cultural, linguistic and ability diverse (CLAD) population.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Lab Hours

Lab Hours (per week):

0

SED200 - Strat for Children w/Excep

Overview

Course Description

Introduces students to the process of developing, implementing, and monitoring individualized instructional strategies. Implementation of Individualized Education Programs (IEP) through goals and objectives is emphasized. Requirement: Ten hours of field experiences and classroom observations.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

EDU105 Intro to Special Education

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARDS	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain normal and abnormal patterns of human development, as it relates to criteria for determining exceptionalities. Standard: CEC 1; CAEP 1; NAEYC 1	1	#1	#1
Compare and contrast the various exceptionalities and how these classifications affect the perceptions and expectations of teachers and parents in regards to children. Standard: CEC 1, 4, 6; CAEP 4; NAEYC 2, 4	2,4	#2	#2
Summarize the processes of: specialized instruction, assessment practices, IEP development and IEP implementation. Standard: CEC 1, 2; CAEP 1; NAEYC 3, 4, 5	3,4,5	#3	#7
Model strategies used to instruct children with various exceptionalities, with an emphasis on managing behavior problems. Standard: CEC 2; CAEP 1; NAEYC 1, 4	1,4	#3	#8
Illustrate knowledge of the impact of public policy on social trends, school reform, and special education, and how it affects their role as an educator. Standard: CEC 7; CAEP 1; NAEYC 6	6	#1	#9

SED205 - Assist Tech for Child/Except

Overview

Course Description

Emphasizes the role of assistive technology and universal design for learning as a related service in supporting children with exceptionalities in educational environments as a related service. Students identify national, state, and local resources and address legal requirements and funding issues. Students are given the opportunity for hands-on experiences with a wide array of technological devices. Requirement: Ten hours of field experiences and classroom observations.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Corequisites

EDU105 Intro to Special Education

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	NAEYC STANDARD	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define assistive technology, universal design for learning and related terminology. Analyze how assistive technology services and universal design for learning support the continuum of child development. Standard: CEC 1; CAEP 1; NAEYC 1	1	#1	#5
Demonstrate an understanding of the assessment process for universal design and assistive technology. Standard: CEC 1; CAEP 4; NAEYC 3	3	#3	#1
Describe applications of assistive technology and universal design for learning as it relates to the educational, home, and recreational setting. Standard: CEC 1; CAEP 1; NAEYC 5	5	#3	#6
Identify both low and high tech applications and adaptations as specially designed instruction. Illustrate features of most commonly used low and high tech assistive devices, birth – age 21. Standard: CEC 1; CAEP 1; NAEYC 5	5	#3	#5
Identify and locate national, state, and local resources for assistive technology available to programs and families to support children with exceptionalities. Standard: CEC 6; CAEP 4; NAEYC 6	6	#2	#6
Examine how assistive technology is addressed in writing and implementing IEPs and IFSPs. Standard: CEC 1; CAEP 1; NAEYC 4	4	#2	#1
Demonstrate understanding of the Individual with Disabilities Act (IDEA), Assistive Technology Act, Americans with Disabilities Act and other federal and state related laws and regulations. Standard: CEC 1; CAEP 4; NAEYC 6	6	#1	#9

SED220 - Paraprofessional Practicum

Overview

Course Description

The course is the culmination of the educational experience of the paraprofessional. This experience allows the student to spend 270 hours in a field placement in an actual classroom under the supervision of the professional certified teacher. The practicum student will be exposed to both inclusive and /or specialized settings to introduce the practicum student to the role and responsibilities of the paraprofessional in relationship to the student, family, and educators. The course supports the acquisition of knowledge and skills for collaboration and positive communication with students and other professionals within diverse learning environments.

Total Credits

Total Credit Hours:

6

Billing Hours

Billing Hours Min:

6

Lecture Hours

Lecture Hours (per week):

1

Lab Hours

Lab Hours (per week):

18

Requirements

Prerequisites

EDU105 Intro to Special Education, SED200 Strat for Children w/Excep, SED205 Assist Tech for Child/Except

SMT211 - Mat Safety & Equip Overview

Overview

Course Description

Provides an overview of basic Nanofabrication processing equipment and materials handling procedures. The focus is on procedural, safery, environment, and health issues in equipment operation and materials handling. Topics to be covered will include: cleanrooms operations, safety, and health issues; vacuum pump systems operation,environmental, safety, and health issues (covering direct drive mechanical roots blowers, turbomolecular, and dry mechanical systems); furnace operation, safety, environmental, and health issues (covering horizontal, vertical, rapid thermal annealing tools); chemical vapor deposition system operation, safety, environmental, and health issues (covering gas delivery, corrosive and flammabel gas storage and plumbing, regulators, and mass flow controllers); and vacuum deposition/ethching system operation, safety, environmental, and health issues (covering microwave and RF power supplies and tuners, heating and cooling units, vacuum gauges, valves, and process controllers). Specific materials handling issues will include DI water, solvens, cleansers, ion implantation sources, diffusion sources, photoresists, developers, metals, dielectrics, and toxic, flammable, corrosive, and high purity gases as well as packaging materials.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2

Lab Hours

Lab Hours (per week):

2

SMT212 - Basic Nanofabrication Process

Overview

Course Description

Provides an overview of basic processing steps in Nanofabrication. The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures. Processing flow will be examined for structures such as microelectromechanical (MEM) devices, biomedical "lab-on-a-chip" structures, display devices, and microelectronic devices including diode, transistor, and full CMOS structures. Students will learn the similarities and differences in both equipment and process flow for each configuration by undertaking "hands-on" processing.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2

Lab Hours

Lab Hours (per week):

2

SMT212L - Basic Nanofabrication Proc Lab

Overview

Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
2

SMT213 - Thin Films in Nanofabrication

Overview
Course Description
Covers thin film deposition and etching practices in nanofabrication. The deposition techniques to be included in the first part of the course will include atmospheric, low pressure, and plasma enhanced chemical vapor deposition and sputtinger, thermal evaporation, and beam evaporation physical vapor deposition. Materials to be considered will include dielectrics (nitride, oxide), polysilicon (doped and undoped), metals (aluminum, tungsten, copper), adhesion promoters and diffusion barriers. The second part of the course will focus on etching processes and will emphasize reactive ion etching (single, wafer, batch), high-ion-density reactors, ion beam etching and wet chemical etching. Students will receive hands-on experience in depositing and etching dielectric, semiconductor, and metal materials using state-of-the-art tools and practicing many of the steps critical to Nanofabrication of semiconductor devices, including microelectronics, MEMs devices, display structures, and structures used in the biotechnology fields.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
2

Lab Hours
Lab Hours (per week):
2

SMT213L - Thin Films Nanofabrication Lab

Overview
Total Credits
Total Credit Hours:
0

Billing Hours
Billing Hours Min:
0

Lab Hours
Lab Hours (per week):
2

SMT214 - Lithography for Nanofab

Overview

Course Description

Covers all aspects of lithography from design and mask fabrication to pattern transfer and inspection. The course is divided into three major sections. The first section describes the lithographic process from substrate preparation to exposure. Most of the emphasis will be on understanding then nature and behavior of photoresist materials. The second section examines the process from development through inspection (both before and after pattern transfer). This section will introduce optical masks, aligners, steppers and scanners. In addition, critical dimension (CD) control and profile control of photoresists will be investigated. The last section will discuss advanced optical lithographic techniques such as phase shifting masks and illumination schemes as well as e-beam, e-ray, EUV, and ion beam lithography.

Total Credits

Total Credit Hours:

3

Billing Hours ⓘ

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

2

Lab Hours

Lab Hours (per week):

2

SMT214L - Lithography for Nanofab Lab

Overview

Total Credits

Total Credit Hours:

0

Billing Hours ⓘ

Billing Hours Min:

0

Lab Hours

Lab Hours (per week):

2

SMT215 - Materials Modification In Nano

Overview

Course Description

Covers in detail the processing steps used in modifying material properties in nanofabrication. Included will be growth and annealing processes utilizing and vertical furnaces as well as rapid thermal annealing. The impact of thermal processing on defects, gettering, impurities and overall electrical, mechanical, optical, electrical and chemical properties will be studied. The student will grow and measure gate and field oxides, implant and activate source and drain regions, and evalute thermal budget requirements using state-of-the-art tools. Included also will be other modification technologies such as ion implantation, diffusion and surface prepatation and treatment. Substrate preparation processing such as slicing, etching, polishing and epitaxial growth will be covered.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
2

SMT215L - Materials Mod In Nano Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
2

SMT216 - Charac Pack & Test of Nanofab

Overview

Course Description
Examines a variety of techniques and measurements essential for controlling device fabrication and final packaging. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end point detection will be discussed. Characterization techniques such as: SEM, XPS/Auger, surface profilometry, advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements will be used on real samples. Basic electrical measurements on device structures for yield analysis and process control will also be stressed. These will include breakdown measurements, junction testings, and C-V and I-V tests and simple transistor characterization. In addition, we will examine mechanical as well electrical characteristics of some simple MEMs devices and chemical and biological responses of nanofabricated biomedical structures. The student will also learn about the manufacturing issues involved in subjects such as interconnects, isolation, and final device assembly. Aluminum, refractory metals and copper depositon techniques and characterization will be discussed in detail along with topics such as diffusion barriers, contact resistance, electromigration, corrosion, stress effects, and adhesion. The importance of planarization techniques such as depostion/etchback adn chemical/ mechanical polishing will be emphasized. Lastly, packaging procedures such as die separation, inspection bonding, sealing and final test for both conventional IC's and novel MEM and biomedical devices will be examined.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Lab Hours

Lab Hours (per week):
2

SMT216L - Charac Pack & Test Nanofab Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
2

SOC150 - Introduction to Sociology

Overview

Course Description
This course introduces students to the scientific study of society. We examine the way our society is structured and the social inequalities that shape the lives of different classes, racial and ethnic groups, and genders. We explore how social institutions create these inequalities and how they teach us to understand and take action in our world. We study some of the consequences of globalization for work, wealth, inequality, migration, and social change.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level, Writing Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. **Define and explain the analytical value of major sociological concepts.**	
2. **Identify different methods of gathering scientific evidence and demonstrate the ability to use evidence to support sociological analyses of society.**	#8 Apply Scientific Reasoning
3. **Explain how cultural and structural factors affect the experiences, life chances, and behaviors of individuals and social groups**	#7 Analyze Human Diversity
4. **Illustrate the "social construction" of concepts such as race and gender**	
5. **Investigate the scale, scope, and character of class, racial, and gender inequalities and the sociological explanations for why these inequalities exist.**	#1 Think Critically
6. **Discuss social issues related to globalization, including the relationship of the US to other nations and peoples around the world.**	

SOC151 - Modern Social Problems

Overview

Course Description

This course offers a sociological approach to the study of social problems. Students will examine how a problem comes to public attention, how it is defined, how data are used or misused in the presentation of a problem, and how political ideology affects what solutions are offered for a problem. Course materials will give special attention to the role of the media in highlighting certain problems and in shaping an audience's perspective on those problems. Students will investigate the social-structural conditions that produce particular problems and explore the ways in which a variety of problems are connected to one another. They will look at the political and economic interests that are tied to those social structures and consider how those interests affect policy. Throughout the course, students will evaluate "solutions" put forward by various advocates and agenices and identify ways in which individuals can become involved in shaping policy debates and/or taking political action. The particular problems addressed will vary, but may include: poverty, heterosexism, violence, substance use/abuse, access to health care, educational disparities, environmental pollution, war and genocide, and/or the exploitation of labor.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Placement Exam Requirements

Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	COLLEGE-WIDE COMPETENCY
Examine critically the role of activists, scholars, politicians, and the media in defining and framing social problems.	1
Assess the credibility of evidence and information concerning particular social problems and critique “common sense” definitions and/or stereotypes associated with them.	1;7
Describe the nature and extent of particular social problems and discuss the social causes of those problems.	1;7

SOC154 - Women & Gender Studies

Overview

Course Description

This interdisciplinary and multidisciplinary course asks students to engage in discussion about historical and contemporary issues in Women and Gender studies. Students will explore how gender intersects with class, race, sexuality, age, and ability within social institutions. The course will examine how androcentric power structures contribute to the oppression of women and marginalized populations, and how these power structures can be challenged through non-binary perspectives and scholarly practices. Through completing this course, students will be prepared to apply the critical tools of Women and Gender Studies to their academic, personal, and occupational lives.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

ENG105 Research and Composition

Corequisites

ENG106 Introduction to Literature

Learning Objectives

Learning Objectives

1. To investigate and critique scholarly sources in the field of women and gender studies and facilitate discussion on these sources in a flipped classroom.
2. To develop one’s understanding of intersectionality and diversity through creating and presenting a PowerPoint, podcast, or documentary film on contributions made by women and marginalized populations.
3. To examine how androcentric power structures contribute to the oppression of women and marginalized populations, while formulating solutions for creating change in the world through planning a business, nonprofit organization, charity, or government policy.

SOC155 - Mass Culture

Overview

Course Description

Surveys popular culture in America as a mirror of American life. Popular music, sports, movies, radio, TV advertising, books, and the industries that support them will be surveyed and analyzed. Hero worship, romance and sex, and the dream of success are examined as major themes of American pop culture. The various relationships between pop culture and education, leisure, family relations and the role of women and minorities are also examined.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Reading Placement - Intro Level

Learning Objectives

Learning Objectives

- explain the characteristics of culture, popular culture, mass culture, and mass communication and how they shape societies and subcultures
- discuss the social consequences of the development and adoption of: language, writing; the printing press; the telephone and telegraph; photography and the movies; radio and television; and the personal computer with wireless Internet connection
- explain the influence of the PC/Internet on the structure, function, and operation of modern media
- describe the process of public relations and advertising campaigns
- explore the legal, ethical, and economic aspects of communication, media, and mass culture

SOC207 - Latin American Studies

Overview

Course Description
This course is an introduction to the study of Latin America and the Caribbean. Taking into consideration the region's complexity, this class examines the geography, politics, history and culture of the area as well as the nuances of its peoples and societies. Students will explore different approaches to the understanding of the area's economic development, the internal and external struggles over political power and forms of rule, and the intricacy of the region's relationship with the Unites States. Topics also include racial and ethnic identity, gender and sexuality dynamics, migration and the migrant experience, and the emergence of new cultural expressions.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Advisement Comments
Prereq: any 100 level SOC, HIS, GEO, or PSC course

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Identify key features of the economic development of Latin American society and identify their underlying causes.		Think critically
Investigate the origins, scale, scope, character, and impact of social inequality in Latin American and the Caribbean and assess change and continuity of these issues.		Think critically
Describe the region's history of political conflict, particularly as it relates to caudillismo, social revolutions and the struggles for democracy.		Think critically
Explain the emergence of cultural identities in the region departing from the concept of transculturation.		Analyze human diversity
Analyze the major causes and consequences of the socioeconomic and political relationship among Latin America and the Caribbean nations and with the United States.		Think critically
Discuss the social construction of race, ethnicity, and gender roles in Latin America and the Caribbean as well as within its migrant communities living in the US.		Analyze human diversity
Illustrate the factors shaping Latin American and Caribbean migration to the US and the challenges facing its population in the US.		Think critically
Highlight and describe the contributions of Latin American and Caribbean people to the United States.		Analyze human diversity

SOC250 - Criminology

Overview

Course Description

This course offers students a sociological perspective on crime and criminal justice in American society. The class investigates differing definitions of the crime problem and explores how people learn about crime, what behaviors they fear, and why some but not all harmful acts are punished by the criminal justice system. Course materials examine connections between biological and social factors that affect violent and impulsive behaviors in certain communities. The class explores how the policies and practices of the criminal justice system respond to street crime and how those responses affect the lives of low-income and racially marginalized populations. The course evaluates the effectiveness of various criminal justice policies.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

SOC150 Introduction to Sociology

Corequisites

ENG105 Research and Composition

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	COLLEGEWIDE STUDENT COMPETENCY
1. Explain and critique the socio-political process through which some but not all types of harmful behavior are defined and punished as crimes;	Think Critically
2. Identify biological, interpersonal, and social structural factors that affect violent and/or impulsive behaviors and discuss the connections between those factors;	Think Critically
3. Describe and evaluate the ways in which class, race, and gender affect one's experience of the criminal justice system in the United States;	Analyze Human Diversity
4. Use scientific research to evaluate selected policies, practices, or institutions of the U.S. criminal justice system.	Apply information literacy skills

SOC251 - The Family

Overview

Course Description

This course involves an analysis of historic and contemporary trends in marriage and family relationships in American society with an emphasis on sociological theory and research. It explores family structures, functions, and processes through the life cycle as well as social challenges impacting the institution of marriage and family.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

SOC150 Introduction to Sociology

Advisement Comments

Prerequisite(s): SOC 150 or SOC 151

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Analyze and discuss controversial social issues regarding marriage and the family from sociology's theoretical and conceptual perspective.		1
Discuss the diverse forms the family takes in a variety of cultures and ethnic groups and examine the changing patterns of family structure and behavior in America.		7

SOC253 - Diversity and Inequality

Overview

Course Description
This course examines the social systems of race/ethnicity, class, gender, and sexuality as they intersect in U.S. society. Students will develop a conceptual framework for understanding systems of power and oppression on both the micro level of lived experience and the macro level of social instituitions. That theoretical framework will be used to analyze how systems of inequality were constructed historically and how they are perpetuated, resisted, and transformed in contemporary society.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
SOC150 Introduction to Sociology

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/OR COLLEGEWIDE STUDENT COMPETENCY
1. Explain how systems of inequality are interconnected within U.S. society.	
2. Describe how systems of inequality serve to oppress and marginalize some groups while simultaneously privileging and empowering other groups.	
3. Identify ways in which historical policies and practices provide a context for understanding contemporary systems of inequality.	
4. Describe the impact of intersecting systems of inequality on the lives of individuals.	
5. Identify ways in which individuals and social movements can resist and transform systems of oppression.	

SOC258 - Cultural Anthropology

Overview

Course Description
A survey of theories and methods of cultural anthropology, cultural evolution, cross-cultural variation, kinship relationships, as well as political, religious, technological and economic organization will be studied. The emphasis will be on non-western and non-industrial societies.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Writing Placement - Intro Level, Reading Placement - Intro Level

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Define and describe the basic subject matter of anthropology and the subdisciplines: cultural, physical, linguistic, and archeological anthropology.	
2. Explore how anthropology can use its cross-cultural perspective to explain phenomena in the modern technological world.	
3. Discuss the social patterns of traditional societies and relate the phenomena to main theories of anthropology.	
4. Define and integrate anthropological concepts such as language, subsistence patterns, economic systems, family and kinship relationships, social control, religion, and leisure.	

SOC260 - Independent Study - Sociology

Overview

Course Description
Reading, research, and/or experimentation on topic (not otherwise covered in college social sciences curriculum) selected in consultation with a faculty member. Special attention is to be given to the particular abilities and interest of students, with individual guidance for advanced studies. The student may choose: research on selected problems, supervised field studies, reading program, among other alternatives. The course maybe a group of students as well as individual study. The course may be repeated for credit. The student is responsible to adhere to the college policies and procedures for independent study.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives
The nature of the course is by definition highly variable. Thus specific behavioral objectives are part of student(s) agreement with the cooperating faculty member. The generic behavioral objectives which are expected include:

1. Student(s) should demonstrate ability to state a problem and rationale for wanting to investigate the particular problem.
2. Student(s) should demonstrate initiative, ability to follow through, and thoroughness of literature research and/or reading.
3. Student(s) should demonstrate

- appropriateness of research design
- completeness of reading list

- correctness of a field study approach and method

1. Student(s) should demonstrate a collegiate presentation of results, findings, ideas, and conclusions.

SOC283 - Intro to Social Psychology

Overview

Course Description
Offers a broad introduction to social psychology, the scientific study of human social influence and interaction. The various ways people think about, effect, and relate to one another will be a major emphasis. Topics within social cognition, social perception and social influence include social self-concept, social judgment, attitudes, persuasion, psychology explanations for social influence and interaction. Research methodologies commonly used to in the discipline will be emphasized through empirical findings.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
PSY140 Introduction to Psychology, SOC150 Introduction to Sociology

SOC297 - Special Top: Deviant Behavior

Overview

Course Description
This course provides a basis for critical thinking about the nature of deviant behavior in our society and how noncomformity is evaluated against socially constructed customs, rules, and norms. A broad overview of the rationales used to justify and control deviance will be examined along with concepts, issues, and research findings in the sociological study of deviant behavior.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

SOC297D - Latin American Studies

Overview

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

SOC297E - Middle East Studies

Overview

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

SPM101 - Intro to Sport Management

Overview

Course Description
This introductory course offering is designed to acquaint students with the career options in sport management. Various concepts in organizational modules dealing with programming, staffing, budgeting, recruiting and public relations will be explored. This course requires outside- class participation in sport-related assignments.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Demonstrate collaboration and cooperation with a variety of sport agencies.	SPMS 2	
Describe how sport history has changed marketing and how to market sport products and services.	SPMS 3	
Demonstrate and discuss what constitutes professionalism and ethics in sport management.	SPMS 4	9
Evaluate different sport management theories.	SPMS 1	1
Discuss the evaluation of sport staff and their performance in a variety of settings.		

SPM102 - Sport History and Philosophy

Overview

Course Description

This course is an investigation into the evelution of sports, beginning with ancient man and progressing into the ancient Olympics up through modern day amateur and professional sports. By examining the progression of sport in our society, and other cultures, we will endeavor to establish philosophical concepts related to contemporary sports.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Discuss the evolution of sports from its ancient beginnings to its contemporary status.		2
Analyze and discuss the transition of sport philosophy from the concepts of Olympic competition to present day professional athletics.		1
Explain how the role of sport "heroes," sport activities, and personalities have influenced history and continue to shape society.		2
Discuss the changing role of women in athletics.		

SPM103 - Science and Wellness

Overview

Course Description

This course investigates the effects of exercise on the human body. Different forms of exercise are studied and their role in the wellness picture is established. Students will learn to evaluate various physical fitness components such as: cardio-respiratory fitness, muscular strength and endurance, flexibility and determine percentage body fat. Each student will be certified in CPR and First Aid and be able to prescribe and implement an exercise program.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Explain how exercise relates to wellness.		
Analyze recreational facilities in terms of safety and participation.	SPMS #8	1
Demonstrate the ability to prescribe favorable exercise routines.		1

SPN105 - Elementary Spanish I

Overview

Course Description

The course will cover basic grammar, pronunciation, and vocabulary of the Spanish Language. Also includes the study of the Spanish-speaking cultures. There will be the practice of listening, speaking, reading, and writing skills.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Learning Objectives

Learning Objectives

1. Define vocabulary, and identify various structures. (1, 2, 3, 4)
2. Derive meaning from the auditory context. (1)
3. Demonstrate correct pronunciation and intonation of Spanish words. (2)
4. Describe self and others. (2)
5. Provide and obtain basic information about events that happen, are happening, and are going to happen. (2)
6. Use basic expressions of courtesy. (2)
7. Read and explain meaning from a written Spanish text that contains learned vocabulary where context and/or background knowledge are supportive. (3)
8. Write a composition in Spanish at least 100 words applying principles of vocabulary and structure. (4)
9. Use the Spanish writing system. (4)
10. Identify geographical areas of the Hispanic world. (5)
11. Identify customs commonly found in the Hispanic world. (5)
12. Describe experiences with Hispanic presence in the student's community. (5)

SPN106 - Elementary Spanish II

Overview

Course Description

The course is the second semester of the first year of Spanish studies. Is a continuation of study of grammar and vocabulary of the Spanish language. Also includes the study of the Spanish-speaking cultures. Emphasis on speaking, listening, reading, and writing skills will be the target.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Prerequisites
SPN105 Elementary Spanish I

Learning Objectives
Learning Objectives
1. Derive meaning from the auditory context in specific content areas in Spanish. (1)
2. Demonstrate correct pronunciation and intonation of Spanish in statement and questions. (2)
3. Use basic courteous expressions, convey basic needs, and talk about events that happened or were happening in Spanish. (2)
4. Read for meaning a written Spanish text that contains learned and new vocabulary structure. (3)
5. Use vocabulary to write structurally simple statements and questions. (4)
6. Write a composition in Spanish of at least 150 words using learned vocabulary and structure. (4)
7. Describe key traditions, simple cultural norms, beliefs, and regional variations of the Hispanic World. (5)
8. Participate in an event or activity in the local Hispanic community. (5)

SPN124 - Spanish for Spanish Speakers I

Overview
Course Description
The course will develop the basic Spanish grammar and pronunciation for a formal academic Spanish. The emphasis will be set on speaking, reading and writing skills in Spanish. The course is intended for native speakers or other students with Spanish native like fluency requiring assessment of the essential language skills. The course will be taught in Spanish.

Total Credits
Total Credit Hours:
3

Billing Hours
Billing Hours Min:
3

Lecture Hours
Lecture Hours (per week):
3

Requirements
Advisement Comments
Intended for native Spanish speakers

Learning Objectives

Learning Objectives

1. Explain the rules of accentuation, syllabification, and capitalization and apply the rules in speaking Spanish. (1)
2. Identify and use of avoid “false cognates.” (1)
3. Use present and preterit verb tenses in the indicative mood, the imperative mood, personal pronouns, adjectives, and the comparative and superlative. (1, 2)
4. Perform oral story-telling, with emphasis in analysis and criticism. (3)

SPN125 - Spanish for Spanish Speaker II

Overview

Course Description

The course will continue with the expansion of grammatical problems in speaking, writing, and reading in Spanish. The course is intended for native speakers or other students with Spanish native like fluency requiring assessment of essential language skills. The course will be taught in Spanish.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):

3

Requirements

Prerequisites

SPN124 Spanish for Spanish Speakers I

Learning Objectives

Learning Objectives

1. Use of future, conditional, and compound tenses in the indicative mood, the imperative, the subjunctive, the passive voice, relative pronouns, prepositions, and certain idiomatic expressions. (1, 2, 3)
2. Use the library to locate Hispanic literary materials. (3)
3. Research and report on the life of a Hispanic author. (3)
4. Translate a short non-Spanish literary work into Spanish. (3)
5. Perform oral story-telling, poetry reading, songs, and dramatizations to demonstrate proficiency in language skills and questioning techniques. (3)

SPN205 - Intermediate Spanish I

Overview

Course Description

The course is the first semester of the second year of two years of Spanish studies and therefore a continuation of study of grammar and vocabulary of the Spanish language. The course also includes the study of Spanish-speaking cultures and emphasis on speaking, listening, reading, and writing skills.

Total Credits

Total Credit Hours:

3

Billing Hours

Billing Hours Min:

3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
SPN106 Elementary Spanish II

Learning Objectives

Learning Objectives

1. Explain main ideas of extended aural discourse of increasingly complex topics in Spanish. (1)
2. Answer questions and express opinions extemporaneously about a variety of topics using Spanish pronunciation, intonation, and a full range of verb forms. (2)
3. Derives meaning from authentic Spanish text on a variety of subjects. (3)
4. Write a composition of at least 200 words using Spanish structure and vocabulary, and following the writing process (organizing, writing, revising, and proofreading. (4)
5. Describe and explain the norms, values, and beliefs of cultures in which Spanish is commonly used. (5)
6. Identify and describe cultural achievements in the Spanish-speaking world. (3, 5)

SPN206 - Intermediate Spanish II

Overview

Course Description
The course is the second semester of the second year of two years of Spanish studies and therefore a continuation of study of grammar and vocabulary of the Spanish language. The course also includes the study of Spanish-speaking cultures and emphasis on speaking, listening, reading, and writing skills.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
SPN205 Intermediate Spanish I

Learning Objectives

Learning Objectives

1. Identify and explain main ideas of lengthy aural discourse of increasingly complex topics in Spanish. (1)
2. Ask questions to elicit information and respond to questions extemporaneously on increasingly complex topics in Spanish. (1, 2)
3. Maintain a conversation in Spanish on increasingly complex topics with moderate accuracy. (2)
4. Derive meaning from authentic and increasingly complex Spanish text. (3)
5. Analyze and evaluate texts which have a clear, underlying structure. (3)
6. Write a composition of at least 300 words in Spanish, using appropriate structure and vocabulary and following the writing process. (4)
7. Describe and explain the norms, values and beliefs of areas in which Spanish is commonly used. (5)

8. Identify and describe cultural achievements in the Spanish-speaking world. (5)

SPN224 - Adv Span for Span Speakers I

Overview

Course Description
The course is intended for native speakers of Spanish or other students with native-like fluency who need improvement in advanced reading and writing and more academic speaking. The course will continue with the expansion of grammar and structure in both oral and written Spanish. The emphasis will be on written composition, grammar review, punctuation and spelling, and reading and discussing literature. This course will be taught in Spanish.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
SPN125 Spanish for Spanish Speaker II

Learning Objectives

Learning Objectives
1. Identify and pronounce words with written accents and words with natural accents. (1)
2. Explain and apply orthographic rules that govern the pronunciation of phonemes. (2)
3. Explain and apply rules of punctuation to sentence construction. (3)
4. Spell words according to Real Academia preference and modern usage. (4)
5. Explain and apply rules of grammar to sentence construction and composition. (5, 7)
6. Read and interpret selected literature in Spanish. (6)
7. Write compositions in Spanish, incorporating rules of grammar, mechanics, and usage. (7)

SPN225 - Adv Span for Span Speakers II

Overview

Course Description
This course is a continuation of SPN 224. Students will continue expanding their knowledge and application of grammatical structures in speaking, writing, and reading. The course is intended for native speakiers of Spanish or students with native-like fluency (requires departmental approval). Students will also write reports, read and analyze longer literature selections, and do formal presentations. The course will be taught in Spanish.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
SPN225 Adv Span for Span Speakers II

Learning Objectives

Learning Objectives

1. Explain and apply rules of grammar to sentence construction and composition in Spanish. (1, 3)
2. Participate in conversation in Spanish. (2)
3. Write compositions in Spanish, incorporating rules of grammar, mechanics, and usage. (3)
4. Read and interpret selected literature in Spanish. (4)
5. Describe the experiences of those who have travel in the Hispanic world. (5)
6. Discuss selections of literature using more formal, academic Spanish. (4)
7. Prepare formal presentation in Spanish. (6)

TDT200L - Operating Power Equipment Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
0

TDT201L - Service Installation Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
0

VET101 - Vet Anatomy & Physiology

Overview

Course Description
An introduction to biochemistry, cell biology and histology, followed by a survey of the structure and function of domestic animals using a systems approach. The physiology of domestic animals will be handled primarily in the lecture, while the anatomy will be discussed in the laboratory with the dissection of the cat as the primary tool.

Total Credits

Total Credit Hours:
4

Billing Hours ⓘ

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Placement Exam Requirements
Biology Placement

Learning Objectives

Learning Objectives
1. Demonstrate a basic understanding of the physiology of domestic animals with an emphasis upon comparison between species. (Program Outcome: K)
2. Acquire knowledge about general anatomy of domestic species. (Program Outcome: K)
3. Demonstrate the ability to identify various organs that compose the systems of the animal body and relate the structure of these organs to their function. (Program Outcome: K)
4. Comprehend and utilize the vocabulary associated with the functions and structures of the bodies of domestic species. (Program Outcome: K)
5. Identify various tissue types (Program Outcome: K)
6. Understand the basic principles of cell biology. (Program Outcome: K)

VET101L - Animal Anat & Phys Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

VET105 - Vet Terminology/Communication

Overview

Course Description
This course will provide students with a basic foundation in the language of veterinary medical terminology used in veterinary medicine. Focus will be placed on the major components (prefixes, suffixes, root words, and combining forms) of medical terms and common abbreviations used in medical records. Students will learn the definitions of veterinary medical terminology, be able to interpret the meaning, build a working vocabulary of veterinary terms, and effectively and professionally communicate these terms to the client in multiple formats: written, oral, non-verbal and electronic.

Total Credits

Total Credit Hours:
1

Billing Hours

Billing Hours Min:
1

Lecture Hours

Lecture Hours (per week):
1

Requirements

Advisement Comments
This course should be taken either before or during the first semester in the Vet Tech program. Available online.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Define, spell, and pronounce medical terms that are commonly used in veterinary medicine.	#1	
Assemble the prefixes, suffixes, and combining root word of veterinary medical terms and properly use the various terms in medical records.	#1	
Comprehend, interpret, and utilize written information containing veterinary medical terms from veterinary literature, journal articles, case studies, and textbooks.	#1	#2, 6
Demonstrate ability to effectively and professionally communicate with a diverse population of people including veterinarians, supervisors, coworkers, clientele and other professionals in multiple formats including written, oral, non-verbal, and electronic.	#1	#2, 7

VET110 - Intro To Veterinary Tech

Overview

Course Description
An introduction to the vocation of veterinary technology; orientation to professional organizations, practice management skills, client relations, ethics, legal and occupational issues.The role of the veterinary technician/veterinary nurse in veterinary medicine, research, industry and private practice will be explored. Students preparing for entry into a new career should learn about their selected profession in a global, holistic fashion.This course is designed to provide the student with a broad overview of the vocation of veterinary technology/veterinary nursing. The student will be able to build a sense of professionalism and have the opportunity to become involved in relevant professional activities and organizations that may serve to shape their future. In addition, this course will explore some of the current issues facing veterinary technicians involving ethics, occupational issues and hazards, and general veterinary practice management topics. Students should begin to explore their employment options during this course.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Requirements

Corequisites
VET105 Vet Terminology/Communication

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Develop an understanding of the vocation of veterinary technology, particularly the role of the veterinary technician in various occupational settings including recognition of legal boundaries.	#1	#9
Develop practice management and office skills necessary to efficiently manage a veterinary office.	#1	#5
Appreciate and explore the Human-Animal bond. Understand the mechanics of humane euthanasia and how veterinary technicians can apply grief management skills with clients.	#1	#2,6
Understand and explore issues regarding animal ethics and animal welfare.	#1	#9
Understand the role of various regulatory agencies and become familiar with legal issues pertinent to the veterinary community. Explore various regulatory requirements applicable to the veterinary hospital.	#1	#9

VET115 - Animal Management & Nutrition

Overview

Course Description
Familiarizes students with the basic principles of management of domestic species. Topics include: animal husbandry, reproduction, restraint, behavior, breed identification and principles of preventative medicine. Principles of nutrition and feeding will also be taught. Animal management and feeding will be discussed in an economical context.

Total Credits

Total Credit Hours:
2

Billing Hours

Billing Hours Min:
2

Lecture Hours

Lecture Hours (per week):
2

Learning Objectives

Learning Objectives

1. Identify the various breeds within the following species: horse, cow, dog, cat, sheep, pig and avian. Articulate the general characteristics of these various breeds. (Program Outcome: M)

2. Understand and apply the basic principles of nutrition and feeds as they relate to management and care of domestic species. (Program Outcome: M)

3. Develop an understanding of basic animal husbandry procedures including: reproduction, sex determination, various surgical procedures (i.e., castration, tail docking, banding). (Program Outcome: M)

4. Discuss economic issues involved in animal management and in the practice of veterinary medicine. (Program Outcomes: B,M)

5. Understand and (later) apply principles and methods of restraint of domestic species. (Program Outcome: M)

6. Demonstrate a thorough understanding of (and be able to articulate) the principles of and content of various preventative health programs for dogs, cats, horse, cows and sheep. (Program Outcome: M)

VET120 - Veterinary Parasitology

Overview

Course Description

Survey of clinically significant internal and external parasites of domestic animals. Parasites covered include: mites, lice, ticks, fleas, flies, nematodes, cestodes, trematodes and protozoans. Parasite life cycles, host infection and pathology will be highlighted. Prevention and treatment of parasitic infections will be discussed. Diagnosis via sample collection, preparation and microscopic evaluation will be taught during the lab section.

Total Credits

Total Credit Hours:

2

Billing Hours

Billing Hours Min:

2

Lecture Hours

Lecture Hours (per week):

1

Learning Objectives

Learning Objectives

1. Demonstrate proficiency at collecting samples for diagnosis of internal and external parasites in domestic species. Utilize the microscope to perform evaluation of samples. (Program Outcome: F,G)

2. Conduct appropriate diagnostic laboratory tests to identify the following external parasites found in various species:
    a. mites.
    b. lice.
    c. ticks.
    d. fleas.
    e. flies. (Program Outcome: F, G, L)

3. Conduct appropriate diagnostic laboratory tests to identify internal parasites found in various species. Students must be able to:
    a. prepare solutions and perform fecal flotations.
    b. perform fecal sedimentation.
    c. perform (fecal) direct smears.
    d. identify adult parasites and ova of common nematodes, trematodes, cestodes and protozoans of domestic species. (Program Outcome: L)

4. Acquire knowledge about parasite life cycles, host infection and host pathology resulting from common internal and external parasites of domestic species. (Program Outcome: L)

5. Correlate information from Educational Objectives #4 with forms of therapeutic interventions and prevention strategies. (Program Outcome: L)

6. Develop an understanding of the zoonotic diseases commonly seen in veterinary medicine related to internal/external parasites. Appreciate the epidemiology, modes of transmission and methods for prevention of common parasitic zoonotic diseases. (Program Outcomes: L,P)

VET120L - Veterinary Parasitology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

VET125 - Veterinary Clinical Lab Tech

Overview

Course Description
Covers the laboratory evaluation of various diagnostic samples including blood, urine and cytologic specimens. Emphasis will be placed upon hematology, serum chemistry, serology, urine analysis and cytology as applied to veterinary medicine. Laboratory work will focus upon lab technique and manual processing of samples. Lecture will focus upon the indication for and interpretation of clinical pathology indices associated with disease states and immunologic function.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHE106 Physiological Chemistry

Learning Objectives

Learning Objectives
This curriculum outline will be divided into laboratory and lecture educational objectives and topic outlines.

LABORATORY EDUCATIONAL OBJECTIVES:

Following satisfactory completion of the laboratory portion of the course, the student shall demonstrate proficiency at performing diagnostic laboratory procedures including:

1. Urinalyses: (Program Outcome: G)
    a. Determine the physical properties of urine including:
        (1) color.
        (2) clarity.
        (3) urine specific gravity (dipstick, refractometer).
    b. Determine the chemical properties of urine using both the dipstick and tablet tests.
    c. Examine and identify sediment contents.
2. Hematology Indices: (Program Outcome: G)
    a. Perform sample collection and storage.
    b. Perform (manually and via automation): Complete Blood Count.
        (1) determine hemoglobin content.
        (2) determine packed cell volume.
        (3) determine total protein content.
        (4) determine/calculate white blood cell count via use of "unopette" kit.
        (5) determine/calculate red blood cell count via use of "unopette" kit.
        (6) perform microscopic examination of blood sample:
            (a) examination of a blood smear/film.
            (b) utilize various blood stains.
            (c) calculate/comprehend the differential count (normal and abnormal).
            (d) identify red blood cell morphology (normal and abnormal).
            (e) estimate platelet count from blood film.
            (f) calculate and estimate absolute differential counts.
            (g) calculate corrected white blood cell count(correcting for nucleated red blood cells).
        (7) calculate all hematologic indices.
        (8) quantify reticulocytes in a blood film.
        (9) quantify platelets in a blood film.

c. Identify/Determine blood parasites on blood film.

(1) Dirofilaria/Dipetalonema: via direct smear, hematocrit tube, Knotts test, Filter test antigen test kit.

(2) Hemobartonella parasite.

d. Perform coagulation tests (time permitting).

(1) activated clotting time.

(2) partial thromboplastin time.

e. Perform serum blood chemistry/serum biochemistry profile.

f. Perform various serologic tests.

(1) collect, prepare sample for ELISA testing methodology.

3. Perform Cytologic Procedures: (Program Outcomes: F,G)

a. collect, prepare, and evaluate canine vaginal smears.

(1) collect vaginal sample appropriately.

(2) prepare slide and stain.

(3) identify cell types present on film.

(4) use knowledge of the canine estrous cycle to interpret the cytologic findings.

b. collect and prepare transudate, exudate cytologic specimens (time permitting).

c. perform fine needle aspirates of skin tumors (time permitting); mount and stain specimen.

d. evaluate semen from large animal specie (time permitting).

4. Prepare laboratory samples for shipment (Program Outcome: F,G)

5. Maintain laboratory equipment (Program Outcome: F,G)

6. Perform quality control procedures (Program Outcomes: F,G)

7. Understand and explain the basic principles of laboratory safety (Program Outcome: G)

LECTURE EDUCATIONAL OBJECTIVES:

Following are the Educational Objectives from the LECTURE portion of the course. Following completion of the lecture portion of the course, students shall:

1. Explain the role of clinical pathology in the diagnosis and treatment of diseases in domestic species. (Program Outcome: G)

2. List and describe the components of the hematopoietic and immune systems. Comprehend structure/function relationships. (Program Outcome: G,H)

3. Develop the ability to handle blood samples for diagnostic testing (collection, preparation, handling, storage). Discuss the types of samples required for various testing protocols. (Program Outcome: G)

4. Discuss the significance/interpretation of: (Program Outcome: G)

   a. complete blood count indices.
   b. serum biochemistry values.
   c. serologic results.

5. Develop the ability to handle urine samples for diagnostic testing (collection, preparation, handling, storage). Discuss the types of samples required for various testing protocols. (Program Outcome: G)

6. Discuss the significance/interpretation of: (Program Outcome: G)

   a. urine specific gravity values.
   b. dipstick indices.
   c. sediment findings.

7. Develop the ability to collect and prepare cytologic specimens for evaluation. Discuss indications for obtaining samples and the testing options available. Discuss the benefits and limitations to cytologic evaluations. (Program Outcome: G)

8. Student shall be able to articulate the difference between benign and malignant cytology findings. (Program Outcome: G)

9. Understand and articulate the pathways and components of hemostasis. (Program Outcome: N)

10. Understand and articulate the cell-mediated and humoral forms of immunity. Comprehend the principles of serologic testing. (Program Outcome: N)

11. Relate clinical pathology laboratory abnormalities with common disease processes. (Program Outcome: G,P)

VET125L - Veterinary Clinical Path Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

VET210 - Large Animal Clinical Proced

Overview

Course Description
Students must show proof of vaccination and health insurance Eight-week laboratory course conducted at the LCCC Animal Facility to provide students with hands-on experience in large animal clinical procedures. Procedures include: restraint, physical examination, venipuncture, administration of medications via various routes, wound treatment, bandaging, sample collection, radiology and general husbandry procedures. Species examined include: cow, horse, sheep and goat. Students must show proof of vaccination and health insurance. Attendance is mandatory.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
VET101 Vet Anatomy & Physiology, VET110 Intro To Veterinary Tech, VET115 Animal Management & Nutrition

Advisement Comments
Student must obtain:
• admission into Vet Tech program
• proof of vaccination: rabies and tetanus
• proof of health insurance

Learning Objectives

Learning Objectives
Upon completion of this laboratory course, students shall be able to:

1. Demonstrate proficiency at performing a basic physical examination on large animal species: (Program Outcomes: D,M)
    a. know the normal temperature, pulse and respiration values of the horse and cow
    b. auscult the heart and lungs with a stethoscope
2. Safely perform restraint procedures on large animal species: (Program Outcome: D)
    a. halter, tie and lead horses and cattle
    b. apply the twitch to a horse
    c. utilize bovine tail restraint technique
    d. apply nose tongs and leads to bovids
    e. restrain sheep and swine
    f. safely load large animals on trailers
3. Demonstrate competent surgical preparation and assisting skills. (Program Outcomes: E,F,M)
    a. surgical scrub and preparation of large animal species for standing surgeries

b. identify and articulate the use of various surgical tools used in common large animal surgeries

c. understand what it is involved in surgical preparation and assisting for common surgical procedures including:

(1) castration

(2) tail docking

(3) dystocia interventions

(4) dehorning: cattle & goats

(5) reduction of prolapsed organs

4. Demonstrate proficiency at general large animal "nursing" skills as required by the American Veterinary Medical Association Committee for Accreditation: (Program Outcomes: F,M)

a. Perform venipuncture on various species

(1) jugular vein: horse, cow

(2) ear vein: swine (optional)

(3) coccygeal vein: cow (optional)

b. Administer parenteral injections

(1) subcutaneous and intramuscular routes

c. Place and maintain an intravenous catheter in the horse

d. Administer medication to various large animal species

(1) oral medications

a. balling gun: ruminants

b. dose syringe: ruminants, horse, pig

c. oral speculum & stomach tube: ruminant (optional)

(2) topical medications to eye

e. Application of bandage, splint, wound dressing, other

(1) equine leg & tail wraps

f. Understand and adhere to adequate sanitation procedures:

(1) clean and disinfect stalls

(2) awareness of safety issues

g. Perform sample collection for various species:

(1) collection of urine samples

(2) collection of blood samples (see venipuncture above)

(3) collection of skin scrapings

h. Provide accurate record keeping, care and observation of hospitalized patients

(1) maintain accurate, complete hospital records

(2) calculate and maintain fluid therapy

i. Trim hooves/feet: ruminants, horses

j. Perform various nursing procedures (time permitting):

(1) applying tattoos to ruminants

(2) clean sheath of horse

(3) testing for mastitis in cows

(4) preparation of mare for vaginal examination and cervical culture

(5) understand and apply principles in the care of newborn and orphaned animals

5. Demonstrate proficiency at conducing radiographic diagnostic studies in large animal species. (Program Outcomes: F,H)

a. position large animal patients for various radiographic studies

b. utilize a radiographic techniques chart

c. utilize and maintain a portable radiographic unit

VET210L - Large Animal Clinical Proc Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
6

VET215 - Animal Disease

Overview

Course Description
Introduction to principles of disease in large and small animal species. Topics include: clinical symptomology, diagnosis, therapy, epidemiology and prevention of common diseases. Toxicology, zoonotic diseases and medical emergencies will be covered. The course will be organized around body systems and associated pathologic conditions.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
VET101 Vet Anatomy & Physiology, VET110 Intro To Veterinary Tech, VET125 Veterinary Clinical Lab Tech, ENG105 Research and Composition

Learning Objectives

Learning Objectives

COURSE OBJECTIVE	PROGRAM OBJECTIVE AND/ OR COLLEGEWIDE STUDENT COMPETENCY
1. Understand and apply critical components of the physical examination. Appreciate the problem-solving approach to animal medicine and disease including: diagnosis, treatment, management and prevention. Discuss the minimum data base concept as it applies to the workup of cases. (Program Outcomes: P,D)	
2. Understand the administration of therapy to poisoned and otherwise traumatized animals. (Program Outcome: P)	
3. Acquire knowledge about the principles of toxicology. (Program Outcome: P)	
4. Develop a thorough understanding of common zoonotic diseases: types, modes of transmission, prevention and the education of clients. (Program Outcomes: M,P)	
5. Develop a knowledge base about the various diseases of small and large animal species organized around the pathophysiology of body systems. Understand clinical signs, epidemiology, diagnosis, therapy and prevention of common diseases. (Program Outcomes: D,G,M,P)	
6. Develop a thorough understanding and be able to discourse with clients regarding the general principles of preventative medicine. Articulate more specific details of preventative medicine protocols as related to common diseases. (Program Outcomes: D,G,M,P)	

VET218 - Veterinary Pharmacology & Anes

Overview

Course Description
Explores the theory and application of pharmacology and anesthesiology. Pharmacologic principles include: drug administration, distribution, excretion and individual variability. Students learn about drug side-effects, dosing and general pharmacologic calculations. The anesthesiology section addresses pre-anesthesia patient assessment, pre- anesthetic drugs, induction, maintenance and post-operative patient monitoring. Students will work with various types of anesthetic equipment. Integrated into the course is a laboratory where students will prepare anesthetic solutions, read prescriptions, and dispense medications. Students will also operate anesthesia machines, an EKG unit and a pulse oximeter.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
CHE106 Physiological Chemistry, VET101 Vet Anatomy & Physiology, VET110 Intro To Veterinary Tech, VET125 Veterinary Clinical Lab Tech

Learning Objectives

Learning Objectives

Section Two will be divided into Pharmacology and Anesthesiology sections so that educational objectives can be more clearly delineated. Following successful completion of this course, a student shall be able to:

Pharmacology: (Program Outcome: C)

1. Recognize general types and classes of drugs
2. Label and package dispensed drugs correctly
3. Use weights and measures correctly
4. Calculate dosages
5. Store, safely handle and dispose of biologics and therapeutic agents, pesticides and hazardous wastes
6. Handle controlled substances properly
7. Prepare medications and reconstitute vaccines
8. Differentiate between abnormal and normal responses to medication
9. Use and explain appropriate routes and methods of drug and vaccine administration
10. Differentiate prescription drugs from over-the-counter medications

Anesthesiology: (Program Outcomes: D,F,O)

1. Calculate and administer preoperative medications (after appropriate pre-op patient assessment)
2. Induce and maintain (considering species variations) anesthesia using the following:
    a. Intravenous anesthetics
    b. Inhalant anesthesia
        (1) induction
        (2) endotracheal tube intubation
        (3) properly operate anesthetic machines
        (4) in- and out-of-circle vaporizers
        (5) rebreathing and non-rebreathing systems
        (6) induction chambers and mask induction
    c. calculate and administer injectable analgesics/sedatives and anesthetics

3. Monitor patient under anesthesia
    a. use esophageal stethoscope
    b. recognize abnormal EKG and audible sounds
    c. monitor signs and stages of various planes of anesthesia
    d. recognize anesthetic emergencies
    e. maintain anesthesia machine
    f. properly scavenge waste and anesthetic gas to protect staff

4. Monitor anesthetic recovery and provide intensive post-operative support

5. Students should be able to articulate the positive and negative aspects of utilizing common pre/intra and post operative anesthetic drugs for various patients. They should be knowledgeable about adverse side effects and cases in which use is contraindicated.

6. Students must demonstrate the ability to keep controlled substance logs as defined by the DEA.

VET220 - Small Animal Clincial Proced

Overview

Course Description
Laboratory course geared toward training students to perform a variety of clinically relevant diagnostic and therapeutic procedures with small animal species. Skills include: restraint, physical examination procedures, venipuncture, administration of medications, sample collection and general first aid. The focus of this course is to help students to develop their technical skills in a veterinary setting. Course will be taught at the Vet Tech Animal Facility at LCCC. Students must provide proof of vaccination and health insurance. Attendance is mandatory.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
VET101 Vet Anatomy & Physiology, VET110 Intro To Veterinary Tech, VET125 Veterinary Clinical Lab Tech

Advisement Comments
Student must obtain:
• admission into Vet Tech program
• proof of vaccination: rabies and tetanus
• proof of health insurance

Learning Objectives

Learning Objectives
(course learning outcomes are linked to program outcomes)

1. The student will learn how to effectively contribute to the efficient operation of the facility by understanding: facility management, regulatory issues, record keeping, confidentiality issues and professional interaction with patients, clients and co-workers. (Program Outcome # 1)

2. The student will safely and efficiently obtain subjective and objective patient data to allow accurate evaluation of a patient's physical status with minimum stress and maximum safety. (patient assessment) (Program Outcomes # 3, 4)

3. The student will understand and demonstrate husbandry and therapeutic techniques appropriate for various small animal species (dogs and cats). (patient care) (Program Outcome # 3)

4. The student will competently perform laboratory procedures. The student will properly collect, prepare, handle appropriate samples for analysis and accurately perform any in-house procedures.

VET220L - Small Animal Clinic Proc Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
4

VET223 - Veterinary Radiology

Overview

Course Description
This course is designed to develop technical competence in diagnostic radiology. The principles learned in previous courses will be applied in a veterinary setting using live animal patients. There will be an overview of the basic principles of radiology; theory of x-ray production, use of maintenance of radiographic/imaging equipment including digital dental radiology, radiation control and safety, restraint and positioning of small animals, and the development of diagnostic radiographs. In addition, students will be troubleshooting/evaluating radiographic quality. Record keeping and safety issues will be discussed. Attendance is mandatory.

Total Credits

Total Credit Hours:
1.5

Billing Hours

Billing Hours Min:
1.5

Lecture Hours

Lecture Hours (per week):
1

Requirements

Prerequisites
VET218 Veterinary Pharmacology & Anes, VET220 Small Animal Clincial Proced

Advisement Comments
Student must obtain:
• admission into Vet Tech program
• proof of vaccination: rabies and tetanus
• proof of health insurance

It should be noted that a reliable source of animals must be secured prior to the beginning of this course.
Additionally, radiation badges must be procured for all students taking this course.

Learning Objectives

Learning Objectives

COURSE LEARNING OBJECTIVE	PROGRAM OBJECTIVE	COLLEGE-WIDE COMPETENCY
Implement and observe recommended radiation safety measures and perform quality control measures to minimize radiation exposure during radiographic procedures.	7	LCCC # 1, 3, 4, 5 NCC: Analyze and Solve Problems, Use Technology
Demonstrate proficiency in completing radiographic logs, and records. Label, file, and store radiographic images.	7	LCCC # 1, 5 NCC: Analyze and Solve Problems, Use Technology
Prepare radiographic equipment appropriately and measure and position live animals for various radiographic images.	7	LCCC # 1, 5 NCC: Analyze and Solve Problems, Use Technology
Produce diagnostic quality radiographic and non-radiographic images; troubleshoot/evaluate radiographic quality.	7	LCCC # 1, 5 NCC: Analyze and Solve Problems, Use Technology

VET223L - Veterinary Radiology Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
1.5

VET225 - Vet Surg Nursing & Anesthesia

Overview

Course Description
This course is designed for students to develop technical competence in surgical procedures, surgical assisting, anesthesia, and radiology. The principles learned in previous courses will be applied in a veterinary setting using live animal patients. Record keeping and safety issues will be discussed. The general principles of surgical assisting including aseptic technique, operating room protocol, surgical instrumentation, surgical preparation, and sterile techniques will be discussed and practiced. Pre, intra- and post-operative anesthetic nursing and pain assessment and management will be learned; students will perform anesthesia on small animals and will perform prophylactic dental procedures. This course will also include the use of digital dental radiography, development of diagnostic radiographs, patient positioning. and evaluation of radiographic quality. Attendance is mandatory.

Total Credits

Total Credit Hours:
3

Billing Hours

Billing Hours Min:
3

Lecture Hours

Lecture Hours (per week):
2

Requirements

Prerequisites
VET218 Veterinary Pharmacology & Anes, VET220 Small Animal Clincial Proced

Advisement Comments
Student must obtain:
• admission into Vet Tech program
• proof of vaccination: rabies and tetanus
• proof of health insurance

Learning Objectives

Learning Objectives
1. The student will effectively participate in all aspects of facility management, practice communicating in a professional manner and carry out all duties within appropriate legal and ethical boundaries. (Program Outcome # 1)

2. Safely and effectively administer and dispense prescribed drugs to patients and clients respectively, while adhering to all pertinent regulatory guidelines. (Program Outcome # 2)

3. Demonstrate the ability to perform patient assessment techniques to obtain subjective and objective patient data to allow for accurate evaluation of the patient's physical status with minimum stress and maximum safety. (Program Outcomes # 3, 6)

4. Demonstrate the ability to perform husbandry, therapeutic and dentistry techniques (patient care) appropriate for our patients. (Program Outcome # 3)

5. Safely and effectively manage patients in all phases of anesthetic procedures. (Program Outcome # 5)

6. Safely and effectively manage patients undergoing (a) surgical procedure(s). (Program Outcome # 4)

7. Safely and effectively produce diagnostic quality radiographic and non-radiographic images. (Program Outcome # 7)

VET225L - Vet Radiology & Surgical Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
4

VET228 - Lab Animal Science & Exotics

Overview

Course Description
Introduction to use and care of laboratory and research animals. Overview of laboratory animal biology, science and management. Topics include: anatomy and physiology, nutrition, breeding, husbandry, sanitation, behavior, handling, nursing, euthanasia and necropsy. Animal welfare regulations and ethics issues will be discussed. Course is comprised of lecture and discussion and the laboratory sessions will provide hands-on experience with venipuncture, injections, gavage and necropsy. Species covered include: rats, mice, guinea pigs and rabbits. Topics in exotic animal portion of course include: restraint, examination, medicine and disease, and husbandry. Species of exotics will vary with availability. Course will be taught at the Vet Tech Animal Facility at LCCC. Students must provide proof of vaccination and health insurance. Attendance is mandatory.

Total Credits

Total Credit Hours:
4

Billing Hours

Billing Hours Min:
4

Lecture Hours

Lecture Hours (per week):
3

Requirements

Prerequisites
VET101 Vet Anatomy & Physiology, VET115 Animal Management & Nutrition

Advisement Comments
Student must obtain:
• admission into Vet Tech program
• proof of vaccination: rabies and tetanus
• proof of health insurance

Learning Objectives

Learning Objectives
1. Understand the basic principles of animal research. (Program Outcomes: B,I)
2. Apply knowledge of local, state and federal welfare guidelines and regulations. (Program Outcomes: B,I)
3. Identify, restrain and handle rodents and rabbits. (Program Outcome: I)
4. Determine the sex of rodents and rabbits. (Program Outcome: I)
5. Perform and/or supervise basic care procedures (feeding, watering, breeding, handling and identification) for rodents and rabbits. (Program Outcome: I)
6. Administer drugs and/or medicaments using appropriate sites and routes for lab animal species. (Program Outcome: I)
7. Perform venipuncture on rodents and rabbits. (Program Outcome: I)
8. Perform oral dosing on rodents. (Program Outcome: I)
9. Anesthetize rodents. (Program Outcome: I)

10. Explain common signs of disease in lab animal species. (Program Outcome: I)

11. Explain the necropsy procedure (via prosection) including: indications, procedure, specimen collection. Discuss rabies suspect handling and safety precautions. (Program Outcomes: I,Q)

12. Explain the procedure for clipping teeth on rabbits and guinea pigs. (Program Outcome: I)

13. Recognize and explain restraint techniques used with non-human primates (via exposure to videotape). (Program Outcome: I)

14. Acquire general information about exotic species including: avians, ferrets, and amphibians. Articulate recommendations on keeping wild animals as pets in captivity. (Program Outcome: J)

VET228L - Lab Animal Science Lab

Overview

Total Credits

Total Credit Hours:
0

Billing Hours ⓘ

Billing Hours Min:
0

Lab Hours

Lab Hours (per week):
3

VET230 - Veterinary Tech Externship

Overview

Course Description
Twelve-week practicum conducted off campus at two designated community locations. A clinical experience, following satisfactory completion of all veterinary technology courses, aimed at providing students the opportunity to apply and refine the skills developed during the program. Competency will be assessed in the following categories: radiology, surgical preparation and assisting, anesthesia, dental prophylaxis, clinical laboratory procedures, general nursing skills, practice management and client communication skills. Students must extern for a total of 240 hours during the summer. Students must provide proof of vaccination and health insurance. Students are responsible for transportation and housing arrangements.

Total Credits

Total Credit Hours:
3

Billing Hours ⓘ

Billing Hours Min:
3

Other Hours

Other Total Hours:
240

Requirements

Advisement Comments
Student must obtain:
• successful completion of all Vet Tech courses
with at least a "C";
• proof of vaccination: rabies and tetanus;
• proof of health insurance

Course is only offer in the Summer

Transportation and housing is the responsibility of the student.

Learning Objectives

Learning Objectives
This course is distinctly unique in the veterinary technology program because the course objectives are the program outcomes. The externship experience is a capstone experience in which students are required to demonstrate/utilize all of the skills obtained during the program at two (professional) veterinary sites. At this point in their training they are expected to have developed all the skills described in the program outcomes such that they can perform as safe and competent practitioners.

* The one exception to this is Program Outcome #8 because not all externs will select a veterinary facility that serves exotics and/or laboratory species.

Thus the course learning outcomes directly correlate with the Program Outcomes:

1. Demonstrate competence in performing and engaging in office and hospital procedures, client relations and communication.

2. Demonstrate proficiency working in the pharmacy and understand and utilize pharmacologic concepts.

3. Safely and competently engage in veterinary medical nursing.

4. Safely and competently engage in veterinary surgical nursing.

5. Safely and competently engage in veterinary anesthetic nursing.

6. Competently perform laboratory procedures.

7. Safely and competently perform diagnostic imaging.

8.* Competently perform laboratory animal and exotic patient husbandry and nursing.

Course Sets

XISC - Artistic Design and Production

- MUS199 Music Elective
- MUS190 Voice Ensemble
- MUS111 Choral Ensemble
- MUS110 Functional Music Theory
- MUS107 American Popular Music
- MUS105 Music After Mozart
- MUS101 Introduction to Music
- DMP116 Sound Design for Animation
- DMP115 Principles of Sound Production
- CMN205 Intro to Video Editing
- CMN125 Intro to Theatre Arts
- CMN113 TV Studio Production
- CMN110 Social Media Strategies

- CMN101 Intro to Media Communications
- ART153 Costume Construction
- ART199 Art Elective
- ART190 Dance
- ART181L 3D Game and Sim. Lab
- ART181 Adv 3D Modeling & Texturing
- ART150 Fashion Design Concepts/Illust
- ART145 The Art of Illustration
- ART125 Jewelry and Metalsmithing I
- ART119 Digital Photography
- ART118 2D Game & Simulation Graphics
- ART115 Painting I
- ART111 Color Theory
- ART110 Drawing I
- ART108 Two Dimensional Design
- ART107 Digital Design
- ART102 Fund of Drawing and Painting
- ART101 Introduction to Art
- ART118L 2D Game & Sim Graphics Lab
- ART135 Three Dimensional Design
- ART132 Prin of 3D Modeling & Texture
- ART130 Ceramics I
- ART128 Comp-Aid Logo&Advertis Design
- ART109 Motion Graphics
- ART128L

Social Science Electives

- SOC150 Introduction to Sociology
- PSY243 Psychopathology
- SOC283 Intro to Social Psychology
- SOC260 Independent Study - Sociology
- SOC258 Cultural Anthropology
- SOC253 Diversity and Inequality
- SOC251 The Family
- SOC250 Criminology
- SOC207 Latin American Studies
- SOC155 Mass Culture
- SOC154 Women & Gender Studies
- SOC151 Modern Social Problems
- PSY283 Intro to Social Psychology
- PSY260 Independent Study-Psychology
- PSY256 Research Methods in Psychology
- PSY255 Intro to Statistical Analysis
- PSY250 Cognitive Psychology
- PSY242 Child Development
- PSY240 Educational Psychology
- PSY145 Human Growth & Development
- PSY142 Industrial/Organization Psych
- PSY141 Psych. Applied to Modern Life
- PSY140 Introduction to Psychology
- PSY120 Psychology of Human Sexuality
- PSC260 Independ Study-Political Sci
- PSC239 U. S. Foreign Policy
- PSC237 International Relations
- PSC236 American Civil Liberties
- PSC235 Constitutional Law
- PSC233 Intro to Public Administration
- PSC207 Latin American Studies
- PSC142 State and Local Government
- PSC141 American Federal Government
- PSC130 Intro to Political Science
- IDS215 Selected Topics Ideas & Cult
- IDS214 Sel Topics in Ideas & Culture
- IDS154 Women & Gender Studies
- HIS207 Latin American Studies
- GEO260 Independent Study-Geography
- GEO115 World Regional Geography

- GEO110 Cultural Geography
- ECO237 International Relations
- ECO202 Principles of Microeconomics
- ECO201 Principles of Macroeconomics
- PSC231 State and Local Government
- PSC230 American Federal Government

Literature Elective

Complete ANY:

- ENG201 World Literature I
- ENG202 World Literature II
- ENG205 American Literature I
- ENG206 American Literature II
- ENG210 British Literature I
- ENG211 British Literature II
- ENG215 Introduction to Poetry
- ENG216 Minoritized Charac Shakespeare
- ENG220 Introduction to Drama
- ENG227 Literature and Film
- ENG230 Contemporary Fiction
- ENG232 Women's Literature
- ENG237 Science Fiction
- ENG238 Gothic and Horror Literature
- ENG242 Latin American Literature

Free Elective

Complete ALL:

Communication - Speech Communication

Complete ANY:

- ART190 Dance
- CMN101 Intro to Media Communications
- CMN113 TV Studio Production
- CMN115 Argumentation & Debate
- CMN118 Media Scriptwriting
- CMN120 Small Group Communication
- CMN125 Intro to Theatre Arts
- CMN130 Acting I
- CMN190 Theatre Production
- CMN191 Theatre Practicum
- ENG111 Speech
- ENG225 Journalism
- MUS190 Voice Ensemble

Electronics Elective

- NET230 CCNA 3-Scaling Networks
- NET225 Routing & Switching Essentials
- NET210L Linux Installation & Admin Lab
- NET171L Msft Azure Administrator Lab
- NET171 Msft Azure Administrator
- NET299 Networking Elective
- NET297C Cloud Essentials
- NET280 Network Technology Internship
- NET242L Advanced Cisco Tech Lab
- NET242 Advanced Cisco Technologies
- NET241L Administering Cisco Tech Lab
- NET241 Administering Cisco Tech
- NET240 Implementing Cisco Technology
- NET237 Identity Microsoft Server 16
- NET236 Ntwking w/ Windows Server 2016
- NET235 CCNA 4-Connecting Networks
- NET220 Intro to Networks
- NET210 Linux Installation & Admin
- NET199 Networking Elective
- NET161 Scripting for Security
- NET151 Msft Azure - Modern Desktops

- NET136 Windows Server 2016
- NET121 CompTIA A+ Core 2
- NET113 A+ Technical Support
- NET111L CompTIA A+ Core 1 Lab
- NET111 CompTIA A+ Core 1
- NET110L CompTIA Network Essentials Lab
- NET109 Orientation: IT Professionals
- MET299 Mech Engineering Tech Elective
- MET199 Mech Engineering Tech Elective
- MET115L Computer-Aided Manuf Lab
- MET115 Computer-Aided Manufacturing
- MET111L Computer Aided Drafting Lab
- MET111 Computer Aided Drafting
- MET106L Mechanical Drafting Lab
- MET106 Mechanical Drafting
- MET104 Manufacturing
- MET101 Mechanical Print Reading
- KBD299 Kitchen & Bath Design Elective
- KBD203 Kitchen and Bath Studio
- KBD202 Kitchen/Bath Estimating
- KBD201L Kitchen/Bath Graphic Des Lab
- KBD201 Kitchen/Bath Graphic Design
- KBD199 Kitchen & Bath Design Elective
- KBD105 Kitchen/Bath Cad Design
- KBD104 Kitchen/Bath Design Prin
- KBD103 Interior Finishing
- KBD102 Color and Textures
- KBD101 Intro to Interior Design
- HAC299 Heat Air Cond & Refr Elective
- HAC250 Commercial & Industrial Wiring
- HAC210 HVACR Practicum
- HAC204 Gas Furnaces
- HAC203 Heat Pumps
- HAC199 Heat Air Cond & Refr Elective
- HAC160 Residential Wiring
- HAC155 Electrical Maintenance II
- HAC150 Heating Systems
- HAC145 Adv Air Conditioning & Refrig
- HAC140 Electrical Maintenance I
- HAC135 Domestic Oil Burners
- HAC132 Air Conditioning & Refrig II
- HAC131 Air Conditioning & Refrig I
- HAC125 Piping and Hydronics
- HAC119 Construction Print Reading
- HAC104 Basic Electricity
- ELE299 Electronics Tech Elective
- ELE210L Electronic Circuits Lab
- ELE199 Electronics Tech Elective
- ELE175L Intro to Microprocessors Lab
- ELE130L Digital Fundamentals Lab
- ELE120L D.C. Circuits Lab
- CON299 Construction Tech/Mgmt Electiv
- CON220 Construction Management
- CON210L Construction Practicum Lab
- CON210 Construction Practicum
- CON204 Construction Codes & Specifica
- CON202 Construction Estimating
- CON201 Basic Surveying
- CON199 Construction Tech/Mgmt Electiv
- CON105 Architectural Computer Appl
- CON104 Concrete/Masonry Principles
- CON103 Interior/Exterior Finishing
- CON102 Framing Construction Tech
- CIS299 Comp Info/Science Elective
- CIS297LC Web-Based Multimedia II Lab
- CIS280 Obj Oriented Prog Visual Basic
- CIS258 Multimedia Practicum

- CIS255 The Database Environment
- CIS250 Operating Systems
- CIS225 Computer Organization & Arch
- CIS222 Application Dev for Mobile Dev
- CIS209 Comp Game/Simulation Prog
- CIS207 Unix Server-Side Scripting
- CIS199 Comp Info/Science Elective
- CIS181 3D Game & Simulation Program
- CIS180 Introduction to Project Mgmt
- CIS172 Java I
- CIS165 Data Structures
- CIS155 Intro Comp Sci-Struc Prog C++
- CIS145 Systems Analysis & Design
- CIS142 Client-Side Scripting II
- CIS141 Client-Side Scripting I
- CIS134 Object-Oriented Prog w/ Python
- CIS133 User Experience Design
- CIS119 College Survival Bootcamp
- CIS118 Game & Simulation Program Fund
- CIS116 Adobe Dreamweaver
- CIS114 Introduction to Game Design
- CIS112 Computation Think & Prog Logic
- CIS111 Electronic Commerce
- CIS110 Business Information Systems
- CIS105 Intro to Comp & Applications
- CIS118L 2D Game & Sim Graphics Lab
- NET297D
- NET265 Capstone for IT Professionals
- NET110 CompTIA Network Essentials
- ELE275 Integrated Circuits
- ELE255 Telecommunications
- ELE235 Programmable Controllers
- ELE215 Industrial Electronics
- ELE210 Electronic Circuits
- ELE175 Intro to Microprocessors
- ELE165 A.C. Circuits
- ELE130 Digital Fundamentals
- ELE120 D.C. Circuits
- CIS226 Adv Multimedia Design
- NET240L Implementing Cisco Tech Lab
- CIS181L 3D Gaming & Sim. Lab
- NET121L A+ Practical Application Lab
- NET225L Routing& Switch Essentials Lab
- NET237L Identity Microsoft Server Lab
- CON103L Interior/Exterior Finish Lab
- CIS255L The Database Environment Lab
- NET236L Windows Server 2016 Lab
- NET136L Windows Server 2016 Lab
- NET220L Intro to Networks Lab
- NET235L CCNA 4-Connecting Networks Lab
- NET230L CCNA-3 Scaling Networks Lab
- CON102L Framing Const. Tech Lab
- CIS155L Intro Comp-Struc Prog C++ Lab
- CIS110L Business Information Sys Lab
- ELE275L Integrated Circuits Lab
- ELE235L Programmable Controllers Lab
- ELE215L Industrial Electronics Lab
- ELE165L A.C. Circuits Lab
- CIS297 Special Topics
- CIS258L Multimedia Practicum Lab
- CIS165L Data Structures Lab
- CIS141L Client-Side Scripting I Lab
- CIS172L
- ASA299 Aviation Elective
- ASA231L Cert Flight Instructor Lab
- ASA230 Flight Inst. Theory (Airplane)
- ASA226 Aircraft Safety

- ASA223L Comm Pilot Multi-engine Lab
- ASA223 Comm Pilot Multi-engine
- ASA219 Air Carrier Operations
- ASA217 Aviation Laws and Regulations
- ASA215 Aerodynamics
- ASA214L Comm Pilot Airplane II Lab
- ASA212L Comm Pilot Airplane I Lab
- ASA211 Commercial Flight Theory
- ASA199 Aviation Elective
- ASA127 Aircraft Systems
- ASA126 Crew Resource Management
- ASA122L Instrument Practical Lab
- ASA121 Instrument Flight Theory
- ASA117 Aviation Meteorology
- ASA112L Private Pilot Practical Lab
- ASA111 Private Pilot-Flight Theory
- ASA105 Small Unmanned Aircraft
- ASA214 Commercial Airline Pilot II
- ASA212 Commercial Pilot Airplane I
- ASA122 Instrument Airplane Practical
- ASA112 Private Pilot Practical
- ASA231 Cert. Flight Instructor (ASEL)
- KBD203L Kitchen & Bath Studio Lab
- KBD103L Interior Finishing Lab
- NET297L Special Topics Lab

Computer Science Electives

Complete ANY:

- CIS105 Intro to Comp & Applications
- CIS110 Business Information Systems
- CIS111 Electronic Commerce
- CIS114 Introduction to Game Design
- CIS133 User Experience Design
- CIS141 Client-Side Scripting I

Digital Arts Elective

Complete ANY:

- ART128 Comp-Aid Logo&Advertis Design
- ART135 Three Dimensional Design
- ART210 Drawing II
- ART248 Web-Based Interactv Animation
- ART258 Multimedia Practicum
- CMN118 Media Scriptwriting
- CMN205 Intro to Video Editing

Mathematics Elective (160 or higher)

- MAT299 Mathematics Elective
- MAT251 Selected Topics in Math II
- MAT250 Selected Topics in Math I
- MAT230 Differential Equations
- MAT210 Linear Algebra
- MAT203 Discrete Mathematics
- MAT201 Calc & Analytic Geometry III
- MAT199 Mathematics Elective
- MAT196 Calc & Analytic Geometry II
- MAT191 Calculus & Analytic Geometry I
- MAT170 Precalculus
- MAT165 College Trigonometry
- MAT160 College Algebra

Studio Art Electives

- ART242 Desktop Publishing
- ART153 Costume Construction
- ART297 Special Topics
- ART260 Independent Study
- ART258 Multimedia Practicum

- ART252 Comp Gen Dynamic Simulations
- ART251 Character Rigging & Animation
- ART225 Jewelry and Metalsmithing II
- ART215 Painting II
- ART210 Drawing II
- ART209 Comp Game & Simulation Art
- ART181 Adv 3D Modeling & Texturing
- ART150 Fashion Design Concepts/Illust
- ART145 The Art of Illustration
- ART125 Jewelry and Metalsmithing I
- ART119 Digital Photography
- ART118 2D Game & Simulation Graphics
- ART115 Painting I
- ART111 Color Theory
- ART110 Drawing I
- ART108 Two Dimensional Design
- ART107 Digital Design
- ART102 Fund of Drawing and Painting
- ART235 Sculpture
- ART230 Ceramics II
- ART135 Three Dimensional Design
- ART132 Prin of 3D Modeling & Texture
- ART130 Ceramics I
- ART265 Capstone in Fine Arts
- ART248 Web-Based Interactv Animation
- ART247 Intro to Animation
- ART226 Adv Multiimedia Design
- ART128 Comp-Aid Logo&Advertis Design
- ART109 Motion Graphics

World Languages

- SPN299 Spanish Elective
- SPN225 Adv Span for Span Speakers II
- SPN224 Adv Span for Span Speakers I
- SPN206 Intermediate Spanish II
- SPN205 Intermediate Spanish I
- SPN199 Spanish Elective
- SPN125 Spanish for Spanish Speaker II
- SPN124 Spanish for Spanish Speakers I
- SPN106 Elementary Spanish II
- SPN105 Elementary Spanish I
- GRM299 German Elective
- GRM206 College German IV
- GRM205 College German III
- GRM199 German Elective
- GRM106 College German II
- GRM105 College German I
- GRM101 Spoken German for Travelers
- FRN299 French Elective
- FRN206 College French IV
- FRN205 College French III
- FRN199 French Elective
- FRN106 College French II
- FRN105 College French I
- ASL299 American Sign Lang Elective
- ASL199 American Sign Lang Elective
- ASL106 American Sign Language III
- ASL105 American Sign Language II
- ASL101 American Sign Language I
- ARB299 Arabic Elective
- ARB199 Arabic Elective
- ARB106 Elementary Arabic II
- ARB105 Elementary Arabic I

Mathematics Elective (150 or higher)

- MAT299 Mathematics Elective
- MAT251 Selected Topics in Math II

- MAT250 Selected Topics in Math I
- MAT230 Differential Equations
- MAT210 Linear Algebra
- MAT203 Discrete Mathematics
- MAT201 Calc & Analytic Geometry III
- MAT199 Mathematics Elective
- MAT196 Calc & Analytic Geometry II
- MAT191 Calculus & Analytic Geometry I
- MAT170 Precalculus
- MAT165 College Trigonometry
- MAT155 Finite Math for Bus/Social Sci
- MAT150 Intro Probability & Statistics
- MAT160 College Algebra

Political Science, Psychology, or Sociology

- SOC150 Introduction to Sociology
- PSY243 Psychopathology
- SOC299 Sociology Elective
- SOC297E Middle East Studies
- SOC297D Latin American Studies
- SOC283 Intro to Social Psychology
- SOC260 Independent Study - Sociology
- SOC258 Cultural Anthropology
- SOC253 Diversity and Inequality
- SOC251 The Family
- SOC250 Criminology
- SOC207 Latin American Studies
- SOC199 Sociology Elective
- SOC155 Mass Culture
- SOC154 Women & Gender Studies
- SOC151 Modern Social Problems
- PSY299 Psychology Elective
- PSY283 Intro to Social Psychology
- PSY260 Independent Study-Psychology
- PSY256 Research Methods in Psychology
- PSY255 Intro to Statistical Analysis
- PSY250 Cognitive Psychology
- PSY242 Child Development
- PSY240 Educational Psychology
- PSY209 Reading & Writing Research
- PSY199 Psychology Elective
- PSY145 Human Growth & Development
- PSY142 Industrial/Organization Psych
- PSY141 Psych. Applied to Modern Life
- PSY140 Introduction to Psychology
- PSY120 Psychology of Human Sexuality
- PSY106 Writing in APA Style
- PSY105 Psychology as a Major
- PSC299 Political Science Elective
- PSC297E Middle East Studies
- PSC297D Latin American Studies
- PSC260 Independ Study-Political Sci
- PSC239 U. S. Foreign Policy
- PSC237 International Relations
- PSC236 American Civil Liberties
- PSC235 Constitutional Law
- PSC233 Intro to Public Administration
- PSC207 Latin American Studies
- PSC199 Political Science Elective
- PSC142 State and Local Government
- PSC141 American Federal Government
- PSC130 Intro to Political Science
- SOC297 Special Top: Deviant Behavior
- PSY255L Intro Statistical Analysis Lab
- PSC231 State and Local Government
- PSC230 American Federal Government
- PSY256L Research Meth in Psych Lab

General Education Electives

- ENG238 Gothic and Horror Literature
- ENG210 British Literature I
- ENG206 American Literature II
- ENG205 American Literature I
- BIO115 Field Biology
- SOC150 Introduction to Sociology
- PSY243 Psychopathology
- ENG111 Speech
- SPN225 Adv Span for Span Speakers II
- SPN224 Adv Span for Span Speakers I
- SPN206 Intermediate Spanish II
- SPN205 Intermediate Spanish I
- SPN125 Spanish for Spanish Speaker II
- SPN124 Spanish for Spanish Speakers I
- SPN106 Elementary Spanish II
- SPN105 Elementary Spanish I
- SOC283 Intro to Social Psychology
- SOC260 Independent Study - Sociology
- SOC258 Cultural Anthropology
- SOC253 Diversity and Inequality
- SOC251 The Family
- SOC250 Criminology
- SOC207 Latin American Studies
- SOC155 Mass Culture
- SOC154 Women & Gender Studies
- SOC151 Modern Social Problems
- PSY283 Intro to Social Psychology
- PSY260 Independent Study-Psychology
- PSY256 Research Methods in Psychology
- PSY255 Intro to Statistical Analysis
- PSY250 Cognitive Psychology
- PSY242 Child Development
- PSY240 Educational Psychology
- PSY145 Human Growth & Development
- PSY142 Industrial/Organization Psych
- PSY141 Psych. Applied to Modern Life
- PSY140 Introduction to Psychology
- PSY120 Psychology of Human Sexuality
- PSC260 Independ Study-Political Sci
- PSC239 U. S. Foreign Policy
- PSC237 International Relations
- PSC236 American Civil Liberties
- PSC235 Constitutional Law
- PSC233 Intro to Public Administration
- PSC207 Latin American Studies
- PSC142 State and Local Government
- PSC141 American Federal Government
- PSC130 Intro to Political Science
- PHY251 Select Top/Natural Science II
- PHY250 Select Topic/Natural Science
- PHY215 General Physics II
- PHY210 General Physics I
- PHY202 Introduction to Physics II
- PHY201 Introduction to Physics I
- PHY110 Elements of Physics
- PHY103 Fundamental of Physics
- PHI210 Comparative Religion
- PHI205 Introduction to Ethics
- PHI203 Introductory Logic
- PHI201 Introduction to Philosophy
- PED180 Intro to Jiu Jitsu & Grappling
- PED155 Volleyball/Softball
- PED150 Adapted Physical Education
- PED135 Golf/Volleyball
- MUS110 Functional Music Theory
- MUS107 American Popular Music

- MUS105 Music After Mozart
- MUS101 Introduction to Music
- MAT230 Differential Equations
- MAT203 Discrete Mathematics
- MAT201 Calc & Analytic Geometry III
- MAT196 Calc & Analytic Geometry II
- MAT191 Calculus & Analytic Geometry I
- MAT188 Business Calculus
- MAT170 Precalculus
- MAT165 College Trigonometry
- MAT155 Finite Math for Bus/Social Sci
- MAT150 Intro Probability & Statistics
- MAT130 Industrial Mathematics
- MAT126 Fund of Mathematics II
- MAT125 Fund of Math I
- MAT121 Mathematics for Allied Health
- MAT120 Survey of Mathematics
- MAT118 Business & Financial Math
- MAT105 Intermediate Algebra
- IDS225 Journalism
- IDS215 Selected Topics Ideas & Cult
- IDS214 Sel Topics in Ideas & Culture
- IDS154 Women & Gender Studies
- HPE101 Personal & Community Health
- HIS260 Independent Study-History
- HIS225 US History Since 1945
- HIS224 World War II
- HIS222 Russia and the World
- HIS220 20th Century World History
- HIS207 Latin American Studies
- HIS131 Western Civilization II
- HIS130 Western Civilization I
- HIS126 History of Black America
- HIS124 US Since Reconstruction
- HIS123 US to Reconstruction
- GRM206 College German IV
- GRM205 College German III
- GRM106 College German II
- GRM105 College German I
- GRM101 Spoken German for Travelers
- GEO260 Independent Study-Geography
- GEO115 World Regional Geography
- GEO110 Cultural Geography
- FRN206 College French IV
- FRN205 College French III
- FRN106 College French II
- FRN105 College French I
- ENG242 Latin American Literature
- ENG237 Science Fiction
- ENG232 Women's Literature
- ENG230 Contemporary Fiction
- ENG227 Literature and Film
- ENG225 Journalism
- ENG220 Introduction to Drama
- ENG216 Minoritized Charac Shakespeare
- ENG215 Introduction to Poetry
- ENG211 British Literature II
- ENG201 World Literature I
- ENG154 Women & Gender Studies
- EDU115 Education Field Experience I
- ECO237 International Relations
- ECO202 Principles of Microeconomics
- ECO201 Principles of Macroeconomics
- CMN225 Journalism
- CMN201 Intercultural Communication
- CMN125 Intro to Theatre Arts
- CMN120 Small Group Communication

- CMN115 Argumentation & Debate
- CMN112 Oral Communica & Presentation
- CMN110 Social Media Strategies
- CMN105 Interpersonal Communication
- CMN101 Intro to Media Communications
- CIS105 Intro to Comp & Applications
- CHN206 Intermediate Chinese II
- CHN205 Intermediate Chinese I
- CHN106 Elementary Chinese II
- CHN105 Elementary Chinese I
- CHE251 Select Top/Natural Science II
- CHE250 Select Topic/Natural Science
- CHE212 Instru & Quantitative Analy II
- CHE211 Instr & Quantitative Analysis
- CHE209 Polymer Chemistry
- CHE206 Organic Chemistry II
- CHE205 Organic Chemistry I
- CHE112 General Chemistry II
- CHE111 General Chemistry I
- CHE108 Essentials of Chemistry
- CHE107 Chemical & Lab Safety
- CHE106 Physiological Chemistry
- CHE105 Fundamentals of Chemistry
- BIO270 Pathophysiology
- BIO251 Select Top/Natural Science II
- BIO250 Select Topics/Natural Science
- BIO220 Introduction to Microbiology
- BIO218 Honors Genetics
- BIO214 Genetics
- BIO205 Principles of Botany
- BIO164 Anatomy & Physiology II
- BIO163 Anatomy & Physiology I
- BIO137 Intro to Environmental Science
- BIO135 Intro to Environmental Science
- BIO130 Cataclysm:Sci of Nat Disasters
- BIO125 Herbs and Herbal Medicine
- BIO124 Nutrition
- BIO116 Topics in Ecology
- BIO111 General Biology II
- BIO110 General Biology I
- BIO107 Biology and Society
- BIO105 Fundamentals of Biology
- BIO101 Introductory Biology
- PHY101 Conceptual Physics
- PED165 Introduction to Yoga
- PED143 Weight Training & Fitness
- PED137 Golf/Bowling
- PED111 Conditioning & Aerobics II
- PED110 Conditioning & Aerobics I
- MAT160 College Algebra
- ESL251 English for Academic Purposes
- ENG202 World Literature II
- AST105 Introduction to Astronomy
- ASL106 American Sign Language III
- ASL105 American Sign Language II
- ASL101 American Sign Language I
- ART212 American Art
- ART115 Painting I
- ART110 Drawing I
- ART101 Introduction to Art
- ARB106 Elementary Arabic II
- ARB105 Elementary Arabic I
- AST106 Introduction to Astronomy
- PED166 Intermediate Yoga
- PED161
- PED160 Karate/Self-Defense
- PED118

- PED117
- PSC231 State and Local Government
- PSC230 American Federal Government

XISC - Technology Design and Support

Complete ANY:

- CMN105 Interpersonal Communication
- CMN120 Small Group Communication
- CFS105 Computer Ethics
- CFS115 Intro to Digital Security
- CIS105 Intro to Comp & Applications
- CIS111 Electronic Commerce
- CIS112 Computation Think & Prog Logic
- CIS114 Introduction to Game Design
- CIS118 Game & Simulation Program Fund
- ART118 2D Game & Simulation Graphics
- CIS133 User Experience Design
- CIS145 Systems Analysis & Design
- CIS155 Intro Comp Sci-Struc Prog C++
- CIS172 Java I
- CIS180 Introduction to Project Mgmt
- CIS181 3D Game & Simulation Program
- NET110 CompTIA Network Essentials
- NET111 CompTIA A+ Core 1
- NET113 A+ Technical Support
- NET121 CompTIA A+ Core 2
- ELE130 Digital Fundamentals

Paralegal Electives

Complete ANY:

- PLG125 Workers' Comp Prac Paralegal
- PLG135 Interviewing for Paralegals
- PLG225 Law of Corporations & Other Bu
- PLG227 Criminal Law & Proc for Parale
- PLG228 Immigration Law for Paralegals
- PLG230 Estates and Trusts
- PLG235 Family Law
- PLG240 Bankruptcy Law
- PLG252 Virtual Para. Law Practice Exp

Science Electives

- SCI105 Integrated Science
- PHY251 Select Top/Natural Science II
- PHY215 General Physics II
- PHY210 General Physics I
- PHY202 Introduction to Physics II
- PHY201 Introduction to Physics I
- PHY110 Elements of Physics
- PHY103 Fundamental of Physics
- CHE251 Select Top/Natural Science II
- CHE250 Select Topic/Natural Science
- CHE212 Instru & Quantitative Analy II
- CHE211 Instr & Quantitative Analysis
- CHE209 Polymer Chemistry
- CHE206 Organic Chemistry II
- CHE205 Organic Chemistry I
- CHE112 General Chemistry II
- CHE111 General Chemistry I
- CHE108 Essentials of Chemistry
- CHE107 Chemical & Lab Safety
- CHE106 Physiological Chemistry
- CHE105 Fundamentals of Chemistry
- BIO270 Pathophysiology
- BIO251 Select Top/Natural Science II
- BIO250 Select Topics/Natural Science
- BIO220 Introduction to Microbiology

- BIO218 Honors Genetics
- BIO214 Genetics
- BIO205 Principles of Botany
- BIO164 Anatomy & Physiology II
- BIO163 Anatomy & Physiology I
- BIO137 Intro to Environmental Science
- BIO135 Intro to Environmental Science
- BIO130 Cataclysm:Sci of Nat Disasters
- BIO125 Herbs and Herbal Medicine
- BIO124 Nutrition
- BIO116 Topics in Ecology
- BIO115 Field Biology
- BIO111 General Biology II
- BIO110 General Biology I
- BIO107 Biology and Society
- BIO105 Fundamentals of Biology
- BIO101 Introductory Biology
- PHY101 Conceptual Physics
- AST105 Introduction to Astronomy
- AST106 Introduction to Astronomy

XISC - Administrative, Support Services, and Hospitality

Complete ANY:

- AOT112 Keyboarding I
- AOT113 Keyboarding II
- AOT114 Keyboarding III

Paralegal Electives

Complete ANY:

- PLG125 Workers' Comp Prac Paralegal
- PLG135 Interviewing for Paralegals
- PLG225 Law of Corporations & Other Bu
- PLG227 Criminal Law & Proc for Parale
- PLG228 Immigration Law for Paralegals
- PLG230 Estates and Trusts
- PLG235 Family Law
- PLG240 Bankruptcy Law
- PLG250 Legal Internship
- PLG252 Virtual Para. Law Practice Exp

History or Geography

- HIS299 History Elective
- HIS297E Middle East Studies
- HIS260 Independent Study-History
- HIS225 US History Since 1945
- HIS224 World War II
- HIS222 Russia and the World
- HIS220 20th Century World History
- HIS207 Latin American Studies
- HIS199 History Elective
- HIS131 Western Civilization II
- HIS130 Western Civilization I
- HIS126 History of Black America
- HIS124 US Since Reconstruction
- HIS123 US to Reconstruction
- GEO299 Geography Elective
- GEO260 Independent Study-Geography
- GEO199 Geography Elective
- GEO115 World Regional Geography
- GEO110 Cultural Geography
- HIS297 Special Topics
- HIS810 American History
- HIS501 Civil War in an Evening
- HIS935 Exploring Your Roots
- HIS932 US Genealogy:Advancing Skills
- HIS931 Intermediate Genealogy Online

- HIS930 Intro to Genealogy
- HIS750 Why the Allies Won
- HIS700 Current Events
- HIS699 Exceptional Amer. Presidents
- HIS606 "Nobody Hears Broken Drum"
- HIS605 History That Shaped the Valley
- HIS604 History of Schuylkill County
- HIS600 History Topics
- HIS500 American Civil War 1861-1865

Mathematics Elective

- MAT299 Mathematics Elective
- MAT251 Selected Topics in Math II
- MAT250 Selected Topics in Math I
- MAT230 Differential Equations
- MAT210 Linear Algebra
- MAT203 Discrete Mathematics
- MAT201 Calc & Analytic Geometry III
- MAT199 Mathematics Elective
- MAT196 Calc & Analytic Geometry II
- MAT191 Calculus & Analytic Geometry I
- MAT188 Business Calculus
- MAT170 Precalculus
- MAT165 College Trigonometry
- MAT155 Finite Math for Bus/Social Sci
- MAT150 Intro Probability & Statistics
- MAT130 Industrial Mathematics
- MAT126 Fund of Mathematics II
- MAT125 Fund of Math I
- MAT120 Survey of Mathematics
- MAT118 Business & Financial Math
- MAT105 Intermediate Algebra
- MAT160 College Algebra

Construction Elective

- CON299 Construction Tech/Mgmt Electiv
- CON220 Construction Management
- CON210L Construction Practicum Lab
- CON210 Construction Practicum
- CON202 Construction Estimating
- CON199 Construction Tech/Mgmt Electiv
- CON104 Concrete/Masonry Principles
- CON103 Interior/Exterior Finishing
- CON103L Interior/Exterior Finish Lab
- CON102L Framing Const. Tech Lab

Humanities Electives

- ENG238 Gothic and Horror Literature
- ENG210 British Literature I
- ENG206 American Literature II
- ENG205 American Literature I
- SPN225 Adv Span for Span Speakers II
- SPN224 Adv Span for Span Speakers I
- SPN206 Intermediate Spanish II
- SPN205 Intermediate Spanish I
- SPN125 Spanish for Spanish Speaker II
- SPN124 Spanish for Spanish Speakers I
- SPN106 Elementary Spanish II
- SPN105 Elementary Spanish I
- PHI210 Comparative Religion
- PHI205 Introduction to Ethics
- PHI203 Introductory Logic
- PHI201 Introduction to Philosophy
- MUS110 Functional Music Theory
- MUS107 American Popular Music
- MUS105 Music After Mozart
- MUS101 Introduction to Music

- IDS215 Selected Topics Ideas & Cult
- IDS214 Sel Topics in Ideas & Culture
- IDS154 Women & Gender Studies
- HIS260 Independent Study-History
- HIS225 US History Since 1945
- HIS224 World War II
- HIS222 Russia and the World
- HIS220 20th Century World History
- HIS131 Western Civilization II
- HIS130 Western Civilization I
- HIS126 History of Black America
- HIS124 US Since Reconstruction
- HIS123 US to Reconstruction
- GRM206 College German IV
- GRM205 College German III
- GRM106 College German II
- GRM105 College German I
- GRM101 Spoken German for Travelers
- FRN206 College French IV
- FRN205 College French III
- FRN106 College French II
- FRN105 College French I
- ENG242 Latin American Literature
- ENG237 Science Fiction
- ENG232 Women's Literature
- ENG230 Contemporary Fiction
- ENG227 Literature and Film
- ENG220 Introduction to Drama
- ENG216 Minoritized Charac Shakespeare
- ENG215 Introduction to Poetry
- ENG211 British Literature II
- ENG201 World Literature I
- ENG154 Women & Gender Studies
- CMN125 Intro to Theatre Arts
- CHN206 Intermediate Chinese II
- CHN205 Intermediate Chinese I
- CHN106 Elementary Chinese II
- CHN105 Elementary Chinese I
- ESL251 English for Academic Purposes
- ENG202 World Literature II
- ASL106 American Sign Language III
- ASL105 American Sign Language II
- ASL101 American Sign Language I
- ART212 American Art
- ART115 Painting I
- ART110 Drawing I
- ART101 Introduction to Art
- ARB106 Elementary Arabic II
- ARB105 Elementary Arabic I

Physical Education

- PED299 Physical Education Elective
- PED199 Physical Education Elective
- PED180 Intro to Jiu Jitsu & Grappling
- PED155 Volleyball/Softball
- PED150 Adapted Physical Education
- PED135 Golf/Volleyball
- PED165 Introduction to Yoga
- PED143 Weight Training & Fitness
- PED137 Golf/Bowling
- PED111 Conditioning & Aerobics II
- PED110 Conditioning & Aerobics I
- PED166 Intermediate Yoga
- PED161
- PED160 Karate/Self-Defense
- PED118
- PED117

XISC - Educational Support

- ECE140 Observation & Recording Tech
- PSY141 Psych. Applied to Modern Life
- EDU120 Teaching with Technology
- EDU114 Careers in Education
- EDU105 Intro to Special Education
- EDU101 Foundations of Education
- ECE199 Early Childhood Ed Elective
- ECE130 Integ Arts/Play in Early Child
- ECE125 Educ & Care of Infants & Todd
- ECE120 Child Growth & Development.
- ECE110 Fund of Early Child Educ
- CMN120 Small Group Communication
- CMN105 Interpersonal Communication

Criminal Justice Electives

Complete ANY:

- CJA104 Intro Private Secur&Loss Cntrl
- CJA106 Intro to Homeland Security
- CJA214 Multicultural Law Enforcement
- CJA232 Stress Red. for Law Enf. Prof.
- CJA234 Ethics in Criminal Justice

Education Electives

Complete ANY:

- EDU120 Teaching with Technology
- EDU125 Assess & Instruct/Div Learners
- EDU202 Fund of Reading Instruction I
- EDU240 Tech Integration in Education
- EDU291 School Comm with Families
- SED200 Strat for Children w/Excep
- SED205 Assist Tech for Child/Except

Lab Sciences

- BIO115 Field Biology
- SCI105 Integrated Science
- PHY215 General Physics II
- PHY210 General Physics I
- PHY202 Introduction to Physics II
- PHY201 Introduction to Physics I
- PHY110 Elements of Physics
- PHY103 Fundamental of Physics
- CHE212 Instru & Quantitative Analy II
- CHE211 Instr & Quantitative Analysis
- CHE206 Organic Chemistry II
- CHE205 Organic Chemistry I
- CHE112 General Chemistry II
- CHE111 General Chemistry I
- CHE108 Essentials of Chemistry
- CHE106 Physiological Chemistry
- CHE105 Fundamentals of Chemistry
- BIO220 Introduction to Microbiology
- BIO218 Honors Genetics
- BIO205 Principles of Botany
- BIO164 Anatomy & Physiology II
- BIO163 Anatomy & Physiology I
- BIO137 Intro to Environmental Science
- BIO111 General Biology II
- BIO110 General Biology I
- BIO105 Fundamentals of Biology
- BIO101 Introductory Biology
- PHY101 Conceptual Physics
- AST106 Introduction to Astronomy

Digital Media Electives

- MUS299 Music Elective
- MUS199 Music Elective
- MUS190 Voice Ensemble
- MUS111 Choral Ensemble
- MUS110 Functional Music Theory
- MUS107 American Popular Music
- MUS105 Music After Mozart
- MUS101 Introduction to Music
- DMP299 Digital Media Prod Elective
- DMP250 Communications Media Practicum
- DMP225 Audio Post-Production
- DMP216 Digital Audio Production
- DMP199 Digital Media Prod Elective
- DMP116 Sound Design for Animation
- DMP115 Principles of Sound Production
- CMN299 Communications Elective
- CMN230 Newspaper Production
- CMN225 Journalism
- CMN205 Intro to Video Editing
- CMN204 Video Field Production
- CMN201 Intercultural Communication
- CMN199 Communications Elective
- CMN191 Theatre Practicum
- CMN190 Theatre Production
- CMN130 Acting I
- CMN125 Intro to Theatre Arts
- CMN121 Intro to Communication Theory
- CMN120 Small Group Communication
- CMN118 Media Scriptwriting
- CMN115 Argumentation & Debate
- CMN113 TV Studio Production
- CMN112 Oral Communica & Presentation
- CMN110 Social Media Strategies
- CMN108 Intro to Public Relations
- CMN105 Interpersonal Communication
- CMN101 Intro to Media Communications
- CIS299 Comp Info/Science Elective
- CIS297LC Web-Based Multimedia II Lab
- CIS280 Obj Oriented Prog Visual Basic
- CIS258 Multimedia Practicum
- CIS255 The Database Environment
- CIS250 Operating Systems
- CIS225 Computer Organization & Arch
- CIS222 Application Dev for Mobile Dev
- CIS209 Comp Game/Simulation Prog
- CIS207 Unix Server-Side Scripting
- CIS199 Comp Info/Science Elective
- CIS181 3D Game & Simulation Program
- CIS180 Introduction to Project Mgmt
- CIS172 Java I
- CIS165 Data Structures
- CIS155 Intro Comp Sci-Struc Prog C++
- CIS145 Systems Analysis & Design
- CIS142 Client-Side Scripting II
- CIS141 Client-Side Scripting I
- CIS134 Object-Oriented Prog w/ Python
- CIS133 User Experience Design
- CIS119 College Survival Bootcamp
- CIS118 Game & Simulation Program Fund
- CIS116 Adobe Dreamweaver
- CIS114 Introduction to Game Design
- CIS112 Computation Think & Prog Logic
- CIS111 Electronic Commerce
- CIS110 Business Information Systems
- CIS105 Intro to Comp & Applications
- CIS118L 2D Game & Sim Graphics Lab

- CIS226 Adv Multimedia Design
- CIS181L 3D Gaming & Sim. Lab
- CIS255L The Database Environment Lab
- CIS155L Intro Comp-Struc Prog C++ Lab
- CIS110L Business Information Sys Lab
- CIS297 Special Topics
- CIS258L Multimedia Practicum Lab
- CIS165L Data Structures Lab
- CIS141L Client-Side Scripting I Lab
- CIS172L
- ART242 Desktop Publishing
- ART153 Costume Construction
- ART299 Art Elective
- ART297 Special Topics
- ART260 Independent Study
- ART258 Multimedia Practicum
- ART252 Comp Gen Dynamic Simulations
- ART251 Character Rigging & Animation
- ART229 Commercial Studio Photog.
- ART225 Jewelry and Metalsmithing II
- ART219 Digital Photography II
- ART215 Painting II
- ART212 American Art
- ART210 Drawing II
- ART209 Comp Game & Simulation Art
- ART199 Art Elective
- ART190 Dance
- ART181L 3D Game and Sim. Lab
- ART181 Adv 3D Modeling & Texturing
- ART150 Fashion Design Concepts/Illust
- ART145 The Art of Illustration
- ART125 Jewelry and Metalsmithing I
- ART119 Digital Photography
- ART118 2D Game & Simulation Graphics
- ART115 Painting I
- ART111 Color Theory
- ART110 Drawing I
- ART108 Two Dimensional Design
- ART107 Digital Design
- ART102 Fund of Drawing and Painting
- ART101 Introduction to Art
- ART260H Indep Stdy-Painting III
- ART118L 2D Game & Sim Graphics Lab
- ART235 Sculpture
- ART230 Ceramics II
- ART135 Three Dimensional Design
- ART132 Prin of 3D Modeling & Texture
- ART130 Ceramics I
- ART265 Capstone in Fine Arts
- ART248 Web-Based Interactv Animation
- ART247 Intro to Animation
- ART226 Adv Multiimedia Design
- ART128 Comp-Aid Logo&Advertis Design
- ART109 Motion Graphics
- ART260L Adv Fashion Design Concepts
- ART248L Web Based Multimedia I
- ART226L Adv Multi & Des Conc Lab
- ART128L
- MUS297 Special Topics

Business Electives

- RES299 Real Estate Elective
- RES199 Real Estate Elective
- RES110 Real Estate Law
- PLG299 Paralegal Studies Elective
- PLG255 Legal Writing
- PLG252 Virtual Para. Law Practice Exp

- PLG250 Legal Internship
- PLG245 Legal Research and Writing
- PLG240 Bankruptcy Law
- PLG235 Family Law
- PLG230 Estates and Trusts
- PLG228 Immigration Law for Paralegals
- PLG225 Law of Corporations & Other Bu
- PLG220 Contract Law & Business Organ
- PLG215 Law Office Management
- PLG200 Civil Litigation & Procedures
- PLG199 Paralegal Studies Elective
- PLG150 Torts and Personal Injury Law
- PLG135 Interviewing for Paralegals
- PLG130 Social Security Disab Practice
- PLG125 Workers' Comp Prac Paralegal
- PLG120 Intro to Paralegal Studies
- PLG115 Law Firm Experience
- PLG105 Law Office Technology
- CMN299 Communications Elective
- CMN230 Newspaper Production
- CMN225 Journalism
- CMN205 Intro to Video Editing
- CMN204 Video Field Production
- CMN201 Intercultural Communication
- CMN199 Communications Elective
- CMN191 Theatre Practicum
- CMN190 Theatre Production
- CMN130 Acting I
- CMN125 Intro to Theatre Arts
- CMN121 Intro to Communication Theory
- CMN120 Small Group Communication
- CMN118 Media Scriptwriting
- CMN115 Argumentation & Debate
- CMN113 TV Studio Production
- CMN112 Oral Communica & Presentation
- CMN110 Social Media Strategies
- CMN108 Intro to Public Relations
- CMN105 Interpersonal Communication
- CMN101 Intro to Media Communications
- CIS299 Comp Info/Science Elective
- CIS297LC Web-Based Multimedia II Lab
- CIS280 Obj Oriented Prog Visual Basic
- CIS258 Multimedia Practicum
- CIS255 The Database Environment
- CIS250 Operating Systems
- CIS225 Computer Organization & Arch
- CIS222 Application Dev for Mobile Dev
- CIS209 Comp Game/Simulation Prog
- CIS207 Unix Server-Side Scripting
- CIS199 Comp Info/Science Elective
- CIS181 3D Game & Simulation Program
- CIS180 Introduction to Project Mgmt
- CIS172 Java I
- CIS165 Data Structures
- CIS155 Intro Comp Sci-Struc Prog C++
- CIS145 Systems Analysis & Design
- CIS142 Client-Side Scripting II
- CIS141 Client-Side Scripting I
- CIS134 Object-Oriented Prog w/ Python
- CIS133 User Experience Design
- CIS119 College Survival Bootcamp
- CIS118 Game & Simulation Program Fund
- CIS116 Adobe Dreamweaver
- CIS114 Introduction to Game Design
- CIS112 Computation Think & Prog Logic
- CIS111 Electronic Commerce
- CIS110 Business Information Systems

- CIS105 Intro to Comp & Applications
- BUS299 Business Elective
- BUS285 Global Business Practice Firm
- BUS284 Business Internship
- BUS262 Recruit, Train & Eval Employee
- BUS259 Compensation & Benefits Mgt
- BUS258 Labor Relations
- BUS257 HRIS/Payroll Administration
- BUS256 International Business
- BUS254 Human Resources Law
- BUS252 Human Resources Management
- BUS248 Essentials of Entrepreneurship
- BUS246 Business Ethics
- BUS241 Business Law I
- BUS221 Principles of Marketing
- BUS211 Principles of Management
- BUS209 Business Communications
- BUS199 Business Elective
- BUS152 Principles of Sales
- BUS150 Business Statistics
- BUS141 Principles of Advertising
- BUS130 Personal Money Management
- BUS120 Intro to Business Organization
- BUS109 Business as a Major
- CIS118L 2D Game & Sim Graphics Lab
- PLG227 Criminal Law & Proc for Parale
- CIS226 Adv Multimedia Design
- CIS181L 3D Gaming & Sim. Lab
- CIS255L The Database Environment Lab
- BUS150L Business Statistics Lab
- CIS155L Intro Comp-Struc Prog C++ Lab
- CIS110L Business Information Sys Lab
- CIS297 Special Topics
- CIS258L Multimedia Practicum Lab
- CIS165L Data Structures Lab
- CIS141L Client-Side Scripting I Lab
- CIS172L
- AOT299 Admin Office Tech Elective
- AOT215 Medical Office Procedures
- AOT206 Office Procedures
- AOT199 Admin Office Tech Elective
- ACC299 Accounting Elective
- ACC262 Accounting Information Systems
- ACC205 Income Tax Accounting
- ACC203 Cost/Managerial Accounting
- ACC202 Intermediate Accounting II
- ACC201 Intermediate Accounting I
- ACC199 Accounting Elective
- ACC161 Principles of Accounting II
- ACC160 Principles of Accounting I
- AOT114 Keyboarding III
- AOT113 Keyboarding II
- AOT112 Keyboarding I
- PLG260 Independent Study

English Electives

- ENG238 Gothic and Horror Literature
- ENG210 British Literature I
- ENG206 American Literature II
- ENG205 American Literature I
- ENG111 Speech
- ENG299 English Elective
- ENG242 Latin American Literature
- ENG241 Literary Magazine Practicum
- ENG237 Science Fiction
- ENG235 Creative Writing
- ENG232 Women's Literature

- ENG230 Contemporary Fiction
- ENG227 Literature and Film
- ENG225 Journalism
- ENG220 Introduction to Drama
- ENG216 Minoritized Charac Shakespeare
- ENG215 Introduction to Poetry
- ENG211 British Literature II
- ENG201 World Literature I
- ENG199 English Elective
- ENG154 Women & Gender Studies
- ENG202 World Literature II

Biology Elective

Complete ANY:

- BIO137 Intro to Environmental Science
- BIO205 Principles of Botany
- BIO218 Honors Genetics
- BIO220 Introduction to Microbiology

Communication - Professional Writing

Complete ANY:

- CMN101 Intro to Media Communications
- CMN108 Intro to Public Relations
- CMN113 TV Studio Production
- CMN115 Argumentation & Debate
- CMN118 Media Scriptwriting
- CMN204 Video Field Production
- CMN230 Newspaper Production
- ENG225 Journalism
- ENG235 Creative Writing

Communication - Public Relations

Complete ANY:

- BUS209 Business Communications
- BUS141 Principles of Advertising
- CMN101 Intro to Media Communications
- CMN115 Argumentation & Debate
- CMN118 Media Scriptwriting
- CMN120 Small Group Communication
- ENG111 Speech
- ENG225 Journalism