

Subj	Cat	Title	Description	Method	MinCr	MaxCr
ACCT	220	FINANCIAL ACCOUNTING	Familiarizes students with a basic understanding of generally accepted accounting principles (GAAP) and its applications. Includes accounting fundamentals, accounting for assets, liabilities and ownership interests, and analysis of accounting data. For non-accounting majors only. Three hours lecture per week. Prerequisite: BUSED.101.	LEC	3	3
ACCT	221	PRIN ACCOUNTING 1	Presents the accounting cycle for service and merchandising activities of a sole proprietorship; special journals and ledgers, accrued and deferred items, cash, receivables and inventories. General ledger and/or spreadsheet computerized accounting is required. Three hours lecture per week.	LEC	3	3
ACCT	222	PRIN ACCOUNTING 2	Further develops the accounting cycle; recording, summarizing, interpreting financial data for partnerships and corporations. Includes cash flows, long-term liabilities, plant assets and payroll accounting. A practice set and general ledger and/or spreadsheet computerized accounting are required. Three hours lecture per week. Prerequisites: ACCT.220 or ACCT.221	LEC	3	3
ACCT	223	MANAGERIAL ACCTG	Focuses on the accounting, other quantitative, and qualitative analyses and information needed to foster optimal management decision making and reporting. Students will study various management accounting concepts, processes, and techniques available to provide that relevant information. Students are expected to be proficient in the use of computerized spreadsheet and word-processing software. For non-accounting majors only. Three hours lecture per week. Prerequisites: ACCT.220 or ACCT.222 and ITM.175.	LEC	3	3
ACCT	310	ACCT. INFO. SYS.	The course emphasizes accounting information systems, transaction cycles, and communication of financial information for management decisions within the context of business. Topics include ERP systems, e-business and electronic commerce, systems documentation including flowcharting, database management, internal control, business processes, transaction cycles, management reporting, projects using a midline ERP package and other projects using business software such as electronic spreadsheets. Three hours lecture per week. Prerequisite: ACCT.321.	LEC	3	3
ACCT	320	INTERNATIONAL ACCTG	Provides theoretical and practical applications of accounting investigated from an international perspective, addresses the different accounting principles and practices that exist among countries, and examines the influences of economic, political, legal, and cultural environments on those differences. International Accounting is an elective course offered in the College of Business. Prerequisites: ACCT.220 or ACCT.222. Three hours lecture per week. May be offered in traditional and distance education formats. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education.	LEC	3	3
ACCT	321	INTER ACCOUNTING 1	Presents the conceptual framework of accounting, accounting environment and information processing system, financial statements and accounting standards, accounting uses of present and future value concepts, cash and receivables and inventories. Use of Peachtree Accounting Software to complete an accounting cycle through computer is required. Three hours lecture per week. Prerequisites: ACCT.222 or ACCT.220. (This is a required course for accounting majors, but it can be taken by non-accounting majors.)	LEC	3	3
ACCT	322	INTER ACCOUNTING 2	Presents accounting standards for property, plant, and equipment, intangible assets, current liabilities and contingencies, long-term liabilities, contributed capital and retained earnings sections of stockholders equity, stock rights and options, and dilutive securities and earnings per share. Requires students to use an approved word processing software package to produce a research paper. Three hours lecture per week. Prerequisites: ACCT.321	LEC	3	3

ACCT	323	INTER ACCOUNTING 3	Presents accounting standards pertaining to investments in debt and equity instruments, revenue recognition, pension plans, leases, income taxes, accounting changes and error correction, Statement of Cash Flows, and accounting disclosures. The use of a spreadsheet program is required. Three hours lecture per week. Prerequisite: ACCT.322.	LEC	3	3
ACCT	324	FEDERAL TAX ACCTG	Introduces basic tax laws pertaining to preparation of individual federal tax returns and supporting schedules. Emphasis on tax law research using federal tax services and contemporary professional literature. Three hours lecture per week. Prerequisite: ACCT.321	LEC	3	3
ACCT	326	INTRO FRAUD EXAM	Provides an introduction to the field of fraud examination. This course will cover basic topics of fraud examination including the nature of fraud, who commits fraud and why, fighting fraud, management fraud, other types of fraud and resolution of fraud. Three hours lecture per week. Prerequisites: ACCT.120, ACCT.220, ACCT.222 or permission of instructor.	LEC	3	3
ACCT	342	AUD THEORY & PROCEED	Provides a rigorous introduction to concepts and techniques used by CPA firms to perform financial statement audits. Includes professional and ethical standards, legal liabilities, audit objectives, planning, risk assessment, evaluation of internal control, selection and use of audit procedures, audit reports, and work paper preparation and techniques to support the audit report. Four hours lecture per week. Prerequisites: ECONOMIC.256, ACCT.310 and ACCT.323.	LEC	4	4
ACCT	348	COST ACCOUNTING	In-depth study of the three major production costs raw material, factory overhead, and labor. This course requires moderate spreadsheet skills. Three hours lecture per week. Perquisite: ACCT.222 or ACCT.223.	LEC	3	3
ACCT	381	VITA	Provides for a comprehensive course of study and practical application of Federal, and Pennsylvania State and Local income taxes through the preparation of actual Federal, State, and Local income tax returns under the auspices of the Internal Revenue Services' Volunteer Income Tax Assistance program. Travel to offsite location(s) required. This course earns two GEPs toward Goal 10 Citizenship in general education. Three hours lecture per week. Prerequisite: ACCT.324.	LEC	3	3
ACCT	424	ADV FED TAX ACCOUNT	Assigns group and individual projects selected from the following areas of advanced tax accounting; partnerships and corporations, Pennsylvania corporate taxes, estates and trusts, reporting to governmental agencies. Includes lectures, discussion of issues and practice in the solution of problems. Three hours lecture per week. Prerequisite: ACCT.324.	LEC	3	3
ACCT	431	ADV ACCOUNTING 2	Topics in Financial Accounting focuses on the accounting and reporting for partnerships, foreign currency transactions, restatement of financial statements of foreign subsidiaries from foreign currency units to U.S. dollars, and accounting and reporting for governmental and non-profit organizations. It also covers segment reporting, interim reporting, derivative financial statements, and SEC reporting requirements. Three hours lecture per week. Prerequisite: ACCT.323.	LEC	3	3
ACCT	432	INTERN IN ACCOUNTING	Provides work experiences in the accounting profession. Prerequisite: 75 semester hours completed, minimum 2.5 GPA, and adequate course preparation for the tasks to be performed.	SUP	1	6
ACCT	436	FRAUD INVESTIGATION	Builds on basic concepts developed in Introduction to Fraud Examination by providing in-depth coverage of techniques used to investigate fraud. Three hours lecture per week. Prerequisite: ACCT.326.	LEC	3	3

ACCT	523	ADV TAX ACCOUNTING	Utilizes case studies and problems to examine in depth the tax consequences of many events and transactions. Emphasis is on applying tax laws, as opposed to learning individual tax rules. Topics include income and expense determinations, property concepts and transactions, and taxation of entities. Three hours lecture per week. Prerequisites: Graduate Standing.	LEC	3	3
ACCT	552	CONTROLLERSHIP	Examines the business environment related to the controller level of managing the firm. Selected topics include: Working capital policy and management, Long-term capital financing, Enterprise continuity related to risk management; Planning and budgeting; Business performance; Cost behavior and cost-volume-profit modeling; Project management and implementation; Human resource management for the accounting department; Customer relationship management from the credit and collection perspective; Corporate social responsibility; Ethics. Three hours lecture per week. Prerequisites: ACCT.220 or ACCT.222, ACCT.223 or permission of the instructor.	LEC	3	3
ACCT	598	SPECIAL TOPICS		LEC	3	3
AEROSTUD	102	FOUND OF THE USAF 2	This survey course briefly covers topics relating to the Air Force and defense. It focuses on the structure and missions of Air Force organizations, officer ship and professionalism. It is also a good introduction into the use of communication skills. One hour lecture per week.	LEC	1	1
AEROSTUD	104	LEADERSHIP LAB	This course (to be taken in conjunction with AS 101 and 102) is a weekly laboratory that touches on the topics of Air Force customs and courtesies, health and physical fitness, and drill and ceremonies.	LEC	0	0
AEROSTUD	202	EVOL OF USAF A&S PW2	This survey course is concerned with the beginnings of manned flight and the development of aerospace power in the United States, including the employment of air power in WWI, WWII, Korea, Vietnam, the Gulf War and the peaceful employment of U.S. air power in civic actions, scientific missions and support of space exploration. One hour lecture per week.	LEC	1	1
AEROSTUD	204	LEADERSHIP LAB	This course (to be taken in conjunction with AS 201 and 202) provides you with the opportunity to demonstrate fundamental management skills and prepares you for Field Training.	LEC	0	0
AEROSTUD	302	AF LEADERSHP STUDY 2	Teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills and communication.	LEC	3	3
AEROSTUD	304	LEADERSHIP LAB	Application of leadership theory, individually and in groups. The course is designed to accomplish effective mission accomplishment, as well as an emphasis in communications skills development. Three hour weekly lab. Prerequisite: AEROSTUD.303 or permission of instructor and the AFROTC approved membership in the Professional Officer Corps.	LEC	0	0
AEROSTUD	402	NAT SEC AFF/PRE AD 2	Designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. The final semester provides information that will prepare the cadets for Active Duty.	LEC	3	3
AEROSTUD	404	LEADERSHIP LAB	Application of leadership theory, individually and in groups. The course is designed to accomplish effective mission accomplishment, as well as an emphasis in communications skills development. Three hour weekly lab. Prerequisite: AEROSTUD.403 or permission of instructor and the AFROTC approved membership in the Professional Officer Corps.	LEC	0	0

ANTHRO	101	INTRO ANTHROPOLOGY	Introduces students to the discipline of General Anthropology. Focuses on the evolution of the human species, the human past as revealed through archaeology, the nature of human language and its relation to culture, and the diversity of cultures that exist in the world today. Open to all students; taught by lecture and discussion; offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity, one GEP toward Goal 5 Natural Sciences and one GEP toward Goal 6 Social Sciences in general education. May be offered in traditional and distance education formats. May be offered in traditional and distance education formats. Prerequisite: None. Three hours lecture per week.	LEC	3	3
ANTHRO	102	ANTHRO & WORLD PROBS	Explores the origins of current global problems and evaluates a variety of cultural solutions to those problems, with the goal of developing a knowledge base and critical thinking skills to engage in reflection, decision-making, and action that leads to responsible global, national, and local citizenship. Open to all students, taught by lecture and discussion, and offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity, one GEP toward Goal 6 Social Sciences and one GEP toward Goal 10 Citizenship in general education. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: None.	LEC	3	3
ANTHRO	200	PRIN CULT ANTHROP	Introduces the discipline of Cultural Anthropology and provides the student with a holistic understanding of human cultural diversity. Variations in human universal practices are presented, including adaptive strategies, subsistence systems, sociopolitical organization, economics, language, art, communication, kinship, family, marriage, gender, rituals, performance, and religion. Open to all students and serves as the foundation course for the anthropology major and minor. Taught by lecture and discussion and offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 6 Social Sciences in general education. Three hours lecture per week. Prerequisites: None.	LEC	3	3
ANTHRO	210	PREHIST ARCHAEOLOGY	Provides a worldwide examination of human prehistory from the origins of our species to the development of early civilizations. Focuses on regional differences and similarities in key evolutionary transitions including the adoption of agriculture and sedentary lifeways, urban origins, and the rise of complex states. Field methods are also discussed. Open to all students and serves as a foundation course for the anthropology major and minor; lecture and discussion; offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity, one GEP toward Goal 5 Natural Sciences and one GEP toward Goal 6 Social Sciences in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3
ANTHRO	220	HUMAN ORIGINS	Studies the emergence and development of humans, ancient fossil evidence, the biological basis of human culture and society, and the origins of the social units of fossil hominids. A review of non-human primates and their behavior is also addressed. Open to all students. Serves as a foundation course for the anthropology major and minor; lecture and discussion; offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3
ANTHRO	221	FORENSIC ANTHRO	Explores the methods of physical anthropology and archaeology in the analysis of human skeletal remains resulting from unexplained deaths. Students will learn how race, sex, age, stature, and cause of death are determined from the human skeleton. Special attention will be paid to the cause and manner of death in fleshed bodies so that students will take away a general knowledge of forensic pathology. Open to all students; taught by lecture and discussion; offered on a rotating basis. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3

ANTHRO	240	NATIVE NORTH AMERICA	Surveys native cultures of North America in prehistoric and early historic periods with emphasis placed on issues facing today's Native American population. Prerequisites: ANTHRO.200, ANTHRO.210, ANTHRO.220 or consent of the instructor. Approved as a diversity course. Three hours lecture per week.	LEC	3	3
ANTHRO	320	CONT WORLD CULTURES	Presents a comparative analysis of selected non-European societies in contrasting cultural and natural areas. Indicates stresses on the natural and social environment; national character; religion and world view; and literary, artistic and musical expression. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements/This course is approved as a Diversity General Education Course. Three hours lecture per week.	LEC	3	3
ANTHRO	390	SOCIALIZAT OF CHILD	Examines life experience and adjustment of the individual through infancy, middle childhood and youth. Reviews contrasting methods of introducing children to adult economic, social and religious activities. This course is approved as a Diversity General Education Course/This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: ANTHRO.200.	LEC	3	3
ANTHRO	460	APPLIED ANTHRO	Provides an introduction to and critical evaluation of the various specializations, ethical issues, career opportunities, methods and theoretical orientations of applied anthropology, which involves the application of anthropological knowledge to identify and solve human problems. The course will utilize a holistic perspective through the synthesis of applied specializations in cultural, biological, linguistic and archaeological anthropology. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisites: ANTHRO.200, ANTHRO.210, ANTHRO.220 or consent of the instructor.	LEC	3	3
ANTHRO	466	INDEPENDENT STUDY	Independent study by a student with faculty guidance of a particular research problem in anthropology. The research problem either extends current course content or deals with an area not covered in the current course offerings in anthropology. A problem is chosen by the faculty member and the student working together. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements.	IND	1	6
ANTHRO	470	ANTHRO THGT & THEORY	Intensive survey of the leading methods and theories of anthropological and ethnological interpretation with special emphasis on the concept of culture and its practical application to modern problems. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week.	LEC	3	3
ANTHRO	495	SPECIAL TOPICS	Specific content will vary with each offering. Provides for instruction and student research within selected areas of interest not available in other courses. The course will reinforce the Anthropology curriculum by offering on special basis coursework not currently available, but which interests selected students and faculty. Topics may include a continuation of coursework beyond what is offered in an Anthropology course or an intensive look at a topic, such as sexuality, sustainability, dance, warfare, ethnographic writing, health, language, environment, ethnology, refugees, immigration, urbanization, art, and advanced methods. May be offered in traditional and distance education formats. Prerequisite: 18 credit hours in anthropology or permission of the instructor. Three hours lecture per week.	LEC	3	3

ARABIC	102	ARABIC II	Develops further the four language skills: speaking, listening, reading, and writing to a proficiency level regarded as basic communication in Arabic. ARABIC.102 is for students who wish to continue studying Arabic at the second level. Arabic language study is taught in its cultural context, including history, culture, diversity, and comparison with students' native culture. Practice in language laboratory and/or use of electronic language-learning media is required. ARABIC.102 is offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 8 Second Language in general education. Three hours lecture per week. Prerequisite: ARABIC.101 or equivalent proficiency level. This course is generally appropriate for students with one or two years of high-school ARABIC.	LEC	3	3
ARABIC	204	ARABIC 4	Emphasizes the four language skills in Arabic including speaking, listening, reading and writing, with a focus on Arabic cultures. The fourth course in the sequence of Arabic courses continues to strengthen communicative proficiency in the Arabic language as well as develop the ability to understand and appreciate Arabic cultures. The course includes a combination of lectures and activities, and students are required to produce formal and informal oral and written assignments. Open to all students and counts for a minor or a major in Languages and Cultures: Arabic Studies Track. Offered once a year. This course earns one GEP toward Goal 1 Communication in general education, one GEP toward Goal 4 Cultures and Diversity in general education and one GEP toward Goal 7 Arts and Humanities in general education. Prerequisite: ARABIC 102 or equivalent (e.g. Placement test or LTI test).	LEC	3	3
ARMY	120	INTRO TO MIL ISSUES	Provides background in basic field craft skills essential to leaders. Learn/apply principles of effective leading. Develops communication skills to improve individual performance and group interaction. Additional instruction includes marksmanship, first aid, and land navigation. One-hour class per week, approximately 20 hours of laboratory time per semester.	LEC	1	1
ARMY	220	APL LDRSHP & MGT II	Presents the fundamentals of small unit leadership, mission planning, and problem solving techniques. Students learn through case studies and field training how to evaluate and apply leadership styles and techniques, additionally students are trained in U.S. Army values, ethics, and leadership aspiring to serve in the U.S. armed services as commissioned officers. Students enrolled in ARMY 220 are taught military leadership specifically related to professionalism, service, honor, and teamwork. Two-hour class per week, approximately 20 hours of professional development time per semester, and a minimum of six hours a week of physical fitness lab. This course earns two GEPs toward Goal 10 Citizenship in general education. Prerequisites: ARMY 110, 120, and 210 - or Instructor permission.	LEC	2	2
ARMY	320	ADV MILITARY SCI II	Practical application of the skills learned in ARMY.310. Students learn how to apply planning and management skills properly in conjunction with small unit tactics. One 3-hour class per week, approximately 20 hours of laboratory time per semester.	LEC	3	3
ARMY	420	ADV LDRSHP & MGT II	Continues the methodology from ARMY.410. Students learn basic procedures of military law and their application in a military environment identify and resolve ethical dilemmas, refine counseling and motivating techniques. One 3-hour class time per week, approximately 20 hours of laboratory time per semester.	LEC	3	3
ARTHSTRY	101	INTRO TO ART HIST	Examines major works of art and architecture and the cultural forces that shaped them from ancient times to the present, from a global perspective. This course will enhance students' understanding of cultural diversity through art appreciation. This course is appropriate for those seeking enrichment. The format is primarily lecture. This course earns two GEPs toward Goal 4 Cultures and Diversity and one GEP toward Goal 7 Arts and Humanities in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3

ARTHSTRY	225	HIST ARCHITECTURE	Surveys the history of architecture from the prehistoric period to the present from a global perspective. Since architecture is the product of social, cultural, religious, and political forces, this course examines various architectural traditions as closely tied to the environment and their local contexts. Lecture/discussion. Open to majors and non-majors. Typically offered in the spring semester. Prerequisites: None. Three hours lecture per week. This course earns two GEPs toward Goal 4 Cultures and Diversity and one GEP toward Goal 7 Arts and Humanities in general education.	LEC	3	3
ARTHSTRY	236	RENAISS IMPRESS ART	Surveys the art and architecture of Europe from 1400 to the 21st century. The course covers major periods and trends in art history, including but not limited to Renaissance, Baroque, Realism, Impressionism, Expressionism, Cubism, Surrealism and Dada. Students examine the relationship between individual works of art, the artists who created them and major cultural, social, and political changes. Lecture/discussion. Open to majors and non-majors. There are no prerequisites for this course, which carries 3 GEPs in Arts and Humanities.	LEC	3	3
ARTHSTRY	346	ORIENTAL ART 2	Examines the visual arts and culture of East Asia-including present-day China, Korea, and Japan-from the Neolithic period to modern times. The course explores the spread of Buddhist culture, the rise of painting and ceramic traditions, and the interplay of philosophical values and artistic styles. Lecture/discussion. Open to majors and non-majors. Typically offered in the spring semester. Prerequisites: None. Three hours lecture per week. This course earns two GEPs toward Goal 4 Cultures and Diversity and one GEP toward Goal 7 Arts and Humanities in general education.	LEC	3	3
ARTHSTRY	360	WOMEN, ART & SOCIETY	Examines the creation, modification, and persistence of images of women from a global perspective and surveys the history of women artists and their artistic contributions. This course will enhance students' understanding of gender and sexuality issues through art appreciation. Lecture/discussion. Open to majors and non-majors. Typically offered in the spring semester. Prerequisites: None. Three hours lecture per week. This course earns three GEPs toward Goal 7 Arts and Humanities in general education.	LEC	3	3
ARTHSTRY	451	MUSEUM EXHIBITION	Provides theoretical backgrounds and hands-on experience of art exhibition. The course examines historical perspectives and recent issues in the field and trains students in designing, organizing, installing, and maintaining exhibitions. Travel to offsite location(s) required. Open to majors and non-majors who meet the prerequisite requirement. Three hours lecture per week. Prerequisites: 60 earned credit hours. This course earns one GEP toward Goal 10 Citizenship in general education.	LEC	3	3
ARTHSTRY	460	RSRCH/WRTNG ART HIST	Introduces critical methodologies in the history of art and focuses on the development of research and writing skills. Seminar format. Required for Art History majors and open to non-majors who meet the prerequisite requirement. Typically offered in the fall semester. Three hours lecture per week. This course earns one GEP toward Goal 1 Communication and one GEP toward Goal 2 Information Literacy in general education. Prerequisites: 60 earned credit hours, at least one Art History course and ENGLISH.101.	LEC	3	3
ARTSTDIO	111	INTRO DRAWING	Examines the fundamentals of drawing and visual communication in general. Students learn and practice perceptual strategies, develop sensitivity to basic drawing materials, and become familiar with varied expressive methods of drawing via analysis of images from historical and contemporary art precedents, including non-Western traditions. Studio sessions include extended work with drawing materials, individual instruction and group critique, demonstrations, and lecture. Introductory Drawing serves as a foundation requirement for Art Studio majors, and as an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. This course meets five hours per week. Prerequisites: None.	LAB	3	3

ARTSTDIO	151	THREE DIMEN DESIGN	Introduction to the basic elements and principles of design such as the organization of visual elements and color, with emphasis on three-dimensional design. Introduces varied expressive methods of three-dimensional design, as well as analysis of images from historical and contemporary art precedents, including non-Western traditions. Studio sessions include extended work with various materials, individual instruction and group critique, demonstrations, and lecture. This course meets 5 hours per week. Homework assignments require students work 4-5 hours each week outside of class. Students are responsible for purchasing some materials for projects. Prerequisites: None.	LAB	3	3
ARTSTDIO	152	TWO DIMENSION DESIGN	Develop an understanding of visual communication through the study and practice of image-making. Gain proficiency in creating two-dimensional compositions. Learn to use a variety of two dimensional art materials. Develop creativity and problem solving skills. Learn to connect formal strategies with content and visual argument. Studio sessions include extended independent work creating images, using drawing, collage, painting, and printmaking. Sessions also include individual instruction and group critique, demonstrations, and lecture. Two-dimensional Design serves as a foundation for further study within the art major. The class meet 5 hours per week. Weekly homework assignments require students to do 4-5 hours' work outside of class. Students are responsible for purchasing some art materials for the course. Prerequisites: None.	LAB	3	3
ARTSTDIO	221	FABR DESIGN: DYE	Investigates dye as a form of visual communication. Students explore the medium's expressive potential, use varied dye techniques, and are introduced to the discipline's professional practices. Students are exposed to varied subjects, conceptual frameworks, and historical precedents, including non-Western traditions. Course content includes silk painting, Japanese Shibori, direct dyeing, improvisational screen printing, color removal and alternative fabric design. Studio sessions include extended work with dye materials, individual instruction and group critique, demonstrations, and lecture. Fabric Design: Dye serves as an interdisciplinary requirement for Art Studio majors, and as an introduction to creative work and visual argument for non-majors. This course meets five hours per week. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: None.	LAB	3	3
ARTSTDIO	223	FABR DESIGN:FBR ART	Investigates fiber art as a form of visual communication. Students explore the medium's expressive potential, use varied printing techniques, and are introduced to the discipline's professional practices, Students are exposed to varied subjects, conceptual frameworks, and historical precedents, including non-Western traditions. Course content includes studio art quilts, embellishment, Inkjet printing on fabric and wearable art. Studio sessions include extended work with fiber art materials, individual instruction and group critique, demonstrations, and lecture. Fabric Design: Fiber Art serves as an interdisciplinary requirement for Art Studio majors and as an introduction to creative work and visual argument for non-majors, this course meets five hours per week. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: None.	LAB	3	3
ARTSTDIO	231	INTRO PAINTING	Introduces the methods and materials of painting as a form of visual communication. Students learn and practice the medium's expressive potential, use varied paint application techniques, apply color theory, and are introduced to the discipline's professional practices, Students are exposed to varied subjects, conceptual frameworks, and historical precedents, including non-Western traditions. Studio sessions include extended work with painting materials, individual instruction and group critique, demonstrations, and lecture. Introductory Painting serves as an interdisciplinary requirement for Art Studio majors and as an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal 1 Communication in general education and two GEPs toward Goal 7 Arts and Humanities in general education. This course meets five hours per week. Prerequisites: None.	LAB	3	3

ARTSTDIO	232	INTERMEDIATE PAINTIN	Continues exploration of the expressive and communicative potential of oil and/or acrylic painting. Varied subjects, critical approaches, and techniques are introduced. Independent research will lead to development of a unique body of work and coherent artist's statement. Studio sessions include demonstration, critique, individual instruction, and extended work sessions. This course meets 5 hours per week; students are expected to spend at least 4-5 hours per week on homework. While the studio provides some materials, students are responsible for purchasing some supplies for projects. Prerequisites: ARTSTDIO.231.	LAB	3	3
ARTSTDIO	241	INTRO SCULPTURE	Investigates sculpture as a form of visual communication. Students learn and practice the medium's expressive potential, use varied techniques, and are introduced to the discipline's professional practices. Students are exposed to varied subjects, conceptual frameworks, and historical precedents, including nonwestern traditions. Studio sessions include extended work with sculpture materials, individual instruction and group critique, demonstrations, and lecture. Introductory Sculpture serves as an interdisciplinary requirement for Art Studio majors, and as an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. This course meets five hours per week. Prerequisites: None.	LAB	3	3
ARTSTDIO	242	INTERMEDIATE SCULPTU	Building on the skills and concepts covered in Introduction to Sculpture, this course further develops sculptural concepts, materials, and processes. The assigned projects will explore advanced materials, techniques, and conceptual practices. Emphasis will be given to the social, cultural, and aesthetic context of the work. Writing, research, class discussion, and critique are integral to the course. This course meets 5 hours per week. Homework assignments require students work 4-5 hours each week outside of class. While the studio provides some materials, students are responsible for purchasing supplies for projects. Prerequisites: ARTSTDIO.241.	LAB	3	3
ARTSTDIO	263	LITHO/RELIEF	Investigates lithography and relief printmaking as a form of visual communication. Students learn and practice the medium's expressive potential, use varied printing techniques, and are introduced to the discipline's professional practices. Students are exposed to varied subjects, conceptual frameworks, and historical precedents, including non-Western traditions. Studio sessions include extended work with printmaking materials, individual instruction and group critique, demonstrations, and lecture. Printmaking: Lithography and Relief serves as an interdisciplinary requirement for Art Studio majors, and as an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. This course meets five hours per week. Prerequisites: None.	LAB	3	3
ARTSTDIO	264	SILKSCREEN	Investigates silkscreen printmaking as a form of visual communication. Students learn and practice the medium's expressive potential, use varied printing techniques, and are introduced to the discipline's professional practices. Students are exposed to varied subjects, conceptual frameworks, and historical precedents, including non-Western traditions. Studio sessions include extended work with printmaking materials, individual instruction and group critique, demonstrations, and lecture. Printmaking: Silkscreen serves as an interdisciplinary requirement for Art Studio majors and as an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. This course meets five hours per week. Prerequisites: None.	LAB	3	3

ARTSTDIO	265	INTAGLIO	Investigates intaglio printmaking as a form of visual communication. Students learn and practice the medium's expressive potential, use varied printing techniques, and are introduced to the discipline's professional practices. Students are exposed to varied subjects, conceptual frameworks, and historical precedents, including non-Western traditions. Studio sessions include extended work with printmaking materials, individuals instruction and group critique, demonstrations, and lecture. Printmaking: Intaglio serves as an interdisciplinary requirement for Art Studio majors, and as an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. This course meets five hours per week. Prerequisites: None.	LAB	3	3
ARTSTDIO	281	INTRO PHOTOGRAPHY	Introduces digital photography as a medium of visual expression. Technical emphasis is placed on fundamental camera controls and introduction to digital photographic techniques. Aesthetic analysis and theory are discussed. Studio sessions consist of critique, demonstration, lecture and individual instruction. Digital Photography serves as an interdisciplinary requirement within the Art Studio program, and as an introduction to creative work and visual argument for non-majors. There are no prerequisites for this course and it meets five hours per week. This course is offered every fall and spring term.	LAB	3	3
ARTSTDIO	282	INTERMEDIATE PHOTOGR	Introduces darkroom photography as a medium of visual expression. Technical emphasis is placed on fundamental camera controls and introduction to darkroom printing techniques. Aesthetic analysis and theory are discussed. Studio sessions consist of critique, demonstration, lecture, and individual instruction. Darkroom Photography serves as an interdisciplinary requirement within the Art Studio program and as an introduction to creative work and visual argument for non-majors. There are no prerequisites for this course and it meets five hours per week. Prerequisites: None	LAB	3	3
ARTSTDIO	291	INTRO DIGITAL ART	Introduces basic vector and raster software technologies while emphasizing individual creativity. Students explore using the computer as an expressive art-making tool. Formal design standards and principles are emphasized along with creative problem solving, experimentation, and personal expression. Studio sessions include demonstration, lecture, critique, individual instruction, and extended work sessions. Introductory Digital Art serves as an interdisciplinary requirement for Art Studio majors and as an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. This course meets five hours per week. There are no prerequisites.	LAB	3	3
ARTSTDIO	292	INTERMEDIATE DIGITAL	Explores crossover and interplay between digital and traditional art making. This is a continuation course that further examines the use of the computer as an art-making tool through a variety of digital art practices. Emphasis will be placed on creative problem solving and the development of individual methods of visual expression. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisites: ARTSTDIO.195 or ARTSTDIO.291.	LAB	3	3

ARTSTDIO	313	ADV DRAWING	Examine and practice the language and techniques of drawing and visual communication in general. Refine perceptual strategies and further develop sensitivity to the application of drawing materials. Utilize varied expressive methods of drawing, and analyze images from historical and contemporary art precedents, including non-Western traditions. Develop a body of work that is individual, refined, and specific. Prepare for non-academic conditions in order to continue working after graduation. Further develop professional practices. Studio sessions include extended work with drawing materials, individual instruction and group critique, demonstrations, and lecture. Advanced Drawing serves as a requirement for Art Studio majors concentrating in Drawing. This course meets five hours per week; students are expected to spend at least four - five hours per week on homework. While the studio provides some materials, students are responsible for purchasing supplies for some projects. This course may be repeated for credit. Prerequisites: ARTSTDIO.210 or ARTSTDIO.212.	LAB	3	3
ARTSTDIO	323	ADV FABRIC DESIGN	Students generate a new body of work stemming from intensive studio practice. Students develop a professional portfolio, a cohesive body of work in Fabric Design and are required to hold an exhibition of advanced work. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: Students must take at least two 200 level courses in Fabric Design before the Advanced level.	LAB	3	3
ARTSTDIO	333	ADVANCED PAINTING	Facilitates individualized painting projects that encourage personal expression. Students begin to develop a professional portfolio. This course may be taken more than once with permission of the instructor. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: ARTSTDIO.232.	LAB	3	3
ARTSTDIO	343	ADVANCED SCULPTURE	Nurtures the development of a cohesive body of sculptural work based on sophisticated techniques and a maturing sense of aesthetic direction. This course stresses the importance of drawing, model making, and research to the creative process. Group and individual discussions emphasize the development of critical vocabulary along with advanced technical exploration. This course meets 5 hours per week. Homework assignments require students work 4-5 hours each week outside of class. Students are responsible for purchasing some art materials for the course. This course may be repeated for credit. Prerequisites: ARTSTDIO.242.	LAB	3	3
ARTSTDIO	363	ADVANCED PRINTMAKING	Examine and practice the language and techniques of printmaking and visual communication in general. Refine perceptual strategies and further develop sensitivity to the application of print media. Utilize varied expressive methods of printmaking, and analyze images from historical and contemporary art precedents, including non-Western traditions. Develop a body of work that is individual, refined, and specific. Prepare for non-academic conditions in order to continue working after graduation. Further develop professional practices. Studio sessions include extended independent work, individual instruction and group critique, demonstrations, and lecture. Advanced Printmaking serves as a requirement for Art Studio majors concentrating in Printmaking. This course meets five hours per week; students are expected to spend at least four- five hours per week on homework. While the studio provides some materials, students are responsible for purchasing supplies for some projects. This course may be repeated for credit. Prerequisites: Two courses in Printmaking (ARTSTDIO 263, 264, 265)	LAB	3	3

ARTSTDIO	376	SP TOPICS/ART STUDIO	Examines the language and techniques of an Art Studio discipline, and visual communication in general. This course introduces perceptual strategies and fosters the development of sensitivity to the application of materials and art media, encourages the use of varied expressive methods, and requires analysis of images from historical and contemporary art precedents, including non-western traditions. Strategies for locating and developing personal imagery and formal strategies are provided. Studio sessions include extended work on projects, individual instruction and group critique, demonstrations, and lecture. Special Topics in Art Studio serves as an elective for Art Studio majors, and as an introduction to creative work and visual argument for non-majors. This course meets five hours per week. Homework assignments require students work 4-5 hours each week outside of class. Students are responsible for purchasing art materials for the course, the cost of which will vary, depending on Art Studio discipline. Prerequisites: None. This course earns one GEP toward Goal 1 communication and two GEPs toward Goal 7 Arts and Humanities in general education.	LAB	3	3
ARTSTDIO	383	ADVANCED PHOTOGRAPHY	Requires students to develop personal photographic projects to produce during the semester. Emphasizes individual exploration of black and white photographic materials and processes. Students must provide a 35 mm camera, film and paper. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: ARTSTDIO.282.	LAB	3	3
ARTSTDIO	393	ADVANCED DIGITAL ART	Provides advanced study in current digital media. Emphasis is on individual investigations, research, writing, and the development of a refined body of new work produced through intensive studio practice and conceptual interests. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: ARTSTDIO.292. May be repeated.	LAB	3	3
ARTSTDIO	480	INTERNSHIP IN ART	Provides upper-level art majors with an opportunity to acquire meaningful experiences in practical work situations outside the regular courses prescribed by art curriculum (e.g. designers, merchandising operations, artists).	SUP	3	6
ASLTERP	101	V/G COMMUNICATION	Emphasizes Visual Gestural Communication with a focus on visual and kinetic readiness via visual/gestural communication techniques, visual discrimination and memory exercises. Topics include Kinetic theory and exercises of the body, face, arms, hands, and their relationship to space, which are an integral part of ASL. Three hours lecture per week. Prerequisites: ASLTERP.226.	LEC	3	3
ASLTERP	155	AMER SIGN LANG 1	Introduces students to communication in American Sign Language (ASL) as it is used within the American Deaf Community. Involves a study of vocabulary, grammar, fingerspelling, the history of ASL and its recognition as a language. The major focus will be the demonstration of beginning expressive and receptive conversational ASL skills. This course earns one GEP towards Goal 1 Communication and two GEP toward Goal 8 Second Language in general education. Prerequisites: None. Three hours lecture per week. May be offered in traditional or distance education formats.	LEC	3	3
ASLTERP	225	LINGUISTICS OF ASL	Introduces ASL structure and organizational properties of ASL as identified through linguistic research, reviews other languages that share similar organizational principles, and discusses the semantic hierarchy and framework for analyzing semantic properties of ASL. Includes an historical overview of social and linguistic events that have influenced transformations in ASL. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: ASLTERP.257.	LEC	3	3

ASLTERP	226	AMER SIGN LANG 2	Builds upon the content of ASL I with emphasis placed on more complex grammatical structures and conversational fluency. Students will demonstrate receptive and expressive skills above the basic level. This course is highly interactive where students' signing skills will be assessed. Prerequisite: ASLTERP 155 (American Sign Language I).	LEC	3	3
ASLTERP	257	AMER SIGN LANG 3	Builds upon the content of ASL II incorporating more complex grammatical structures, conversational fluency and conceptual accuracy. Demonstration of receptive and expressive skills to the intermediate level, including seeing multi-signer of diversity with sociolinguistic variation. Acquisition with more depth and longer conversation with sophisticated grammatical features of ASL. Increases amount of numbers and fingerspelling for comprehension. Also more fluency and accuracy of expressive fingerspelling and number too. Prerequisite: ASLTERP 226 (American Sign Language II)	LEC	3	3
ASLTERP	260	INTERP EDUC SETTING	Study of interpreting within a variety of educational settings including postsecondary, secondary and elementary areas. Topical areas include: recent legislation on the status of interpreters, characteristics of various meetings and visually coded English Sign Systems. Three hours lecture per week.	LEC	3	3
ASLTERP	358	ASL 5	Continues in the development of ASL I-IV in developing a high level of fluency in American Sign Language. Students utilize both expressive and receptive skills in regular weekly communications with persons in the Deaf Community. The students learn idioms and expansion features as well as current events in the Deaf community and all around the world. Prerequisites: ASLTERP.327 ASL IV	LEC	3	3
ASLTERP	365	CONSECUTIVE INTERP	Practices skills where students utilize their translation skills to become fluent in consecutively interpreting discourse from ASL to English and English to ASL with delays of a few seconds after the source utterance is finished. Prerequisite: ASLTERP 335 Translation.	LEC	3	3
ASLTERP	370	TACTILE INTERPRETING	Provides interpreting students with an introductory level overview of working with Deaf-Blind people. Students will become familiar with features of the Deaf-Blind community, learn common etiologies of deaf-blindness, learn basic communication and guiding skills for use with Deaf-Blind people, and experience a variety of situations simulating deaf-blindness. Students will also learn about support services and assistive technology for those who are Deaf-Blind. Students will learn interpreting strategies when working with Deaf-Blind Populations based on vision abilities. Prerequisites: ASLTERP.335 and must be taken concurrently with ASLTERP.365 Consecutive Interpreting. Three hours lecture per week.	LEC	3	3
ASLTERP	450	TRANSLITERATION	Integrates interpreting skills previously developed in ASLTERP 365 Consecutive Interpreting. The students will be able to identify when to use ASL versus contact signing, incorporating strategies to clearly convey English content, and to match the consumer's language preference during interactive interpreting settings. This course will consist primarily of lecture, discussion, guest speakers, interactive interpretation, and role-plays. Prerequisites: ASLTERP 365 - Consecutive Interpreting.	LEC	3	3
ASLTERP	460	PRACTICUM SEMINAR	Discusses various factors of the interpreting profession in order to prepare students for their practicum and working conditions after graduation. Students will also begin their preparation for the national credentialing written examination. Prerequisite: ASLTERP 420 Simultaneous Interpreting.	LEC	3	3

AUDSLP	152	INTRO TO COMM DIS	Provides an overview of human communication and swallowing processes. An introduction to speech, language, hearing, communication and swallowing disorders is provided. The professions of communication disorders and the roles of speech language pathologists, audiologists and educators are discussed. This course earns one GEP toward Goal 5 Natural Sciences and two GEPs toward Goal 6 Social Sciences in general education. Three hours lecture per week. May be offered in traditional and distance education formats. Prerequisite: None.	LEC	3	3
AUDSLP	200	INTRO TO AUDIOLOGY	Introduces students to the anatomy, physiology, disorders, basic assessment, and habilitation/rehabilitation of the auditory system. Three hours lecture per week.	LEC	3	3
AUDSLP	220	PHONETICS	Studies of the physiological, acoustical, perceptual, and descriptive aspects of speech and sound production. Primary emphasis is placed on the description, classification, and transcription of speech sounds. Provides a base of knowledge for the diagnosis and treatment of phonemic and phonological disorders of communication. Must be an Audiology/Speech Pathology Major. Must be an Audiology/Speech Pathology major in order to enroll in the program's courses. Three hours lecture per week.	LEC	3	3
AUDSLP	260	CLINICAL OBSERVATION	This course provides observation experiences within the scope of practice of speech-language pathology and audiology under the direction of an ASHA certified professional. Students acquire a minimum of 25 observation hours for ASHA certification and gain information on professional credentialing, contemporary issues, and ethical conduct. Prerequisite: 15 earned credits. Must be an Audiology/Speech Pathology Major. Three hours lecture per week.	LEC	3	3
AUDSLP	325	LANG DIS CHILDREN	This course provides a knowledge base for the nature of language, cognitive and communication disorders and differences in children. The course takes a functional approach to the assessment and intervention of childhood language disorders with a focus on utilizing natural contexts as the clinical arena. The role of language in literacy acquisition and cultural-linguistic differences that masquerade as disorders are infused. Must be an Audiology/Speech Pathology Major. Three hours lecture per week. Prerequisites: AUDSLP.240.	LEC	3	3
AUDSLP	335	ACQUIRED DISORDERS	This course provides the undergraduate student with an introduction to medical speech pathology. Topics covered include neuroanatomy related to communication/swallowing disorders, and the etiologies, characteristics, assessment and management of communication/swallowing disorders secondary to medical diagnoses such as cerebral vascular accident, traumatic brain injury, and degenerative neurological disorders. Three hours lecture per week. Must be an Audiology/Speech Pathology Major. Prerequisites: AUDSLP.152.	LEC	3	3
AUDSLP	340	COGNITIVE BEH PRIN	This course will cover the fundamentals of behavioral and cognitive theory. Emphasis will be placed upon application in clinical and school settings associated with the delivery of services to speech-language disordered clients. Must be an Audiology/Speech Pathology Major. Three hours lecture per week.	LEC	3	3
AUDSLP	410	APPL SPCH SCIENCE	Applied speech science is the study of acoustic phonetics, speech physiology and the processes by which listeners perceive speech. In particular, this course will emphasize the application of this knowledge to the clinical evaluation of both normal and disordered speech via the use of various types of speech analysis instrumentation. Must be an Audiology/Speech Pathology Major. Prerequisites: BIOLOGY.366, PHYSICS.106, AUDSLP.220. Three hours lecture per week.	LEC	3	3

AUDSLP	420	ELL: CULT AWARE&SENS	This course is intended for pre-service/practicing professional educators including speech-language pathologists who support English Language Learners (ELLs) in educational settings. Students will acquire knowledge and skills in working with culturally and linguistically diverse students and families. Course content will focus on behaviors, beliefs, values and attitudes of ELLs and their families. Strategies for promoting cultural awareness and sensitivity within educational and community settings will be discussed. This course is designed to meet the ESL Program Specialist certification for developing cultural awareness/sensitivity. Prerequisites: Teacher education or Audiology/Speech Pathology major or consent of audiology and speech pathology department chairperson.	LEC	3	3
AUDSLP	430	FUND OF AUDIOLOGY	Discussion of the anatomy and physiology of the auditory system and the role of hearing in the development of speech and language. The course will provide a synopsis of diagnostic and habilitation/rehabilitation audiologic principles. Prerequisites: 90 credit hours. Three hours lecture per week.	LEC	3	3
AUDSLP	432	COMM/ED ELLS	Provides students with the tools necessary to design standards aligned, authentic, communicative ELL instructional program materials to facilitate English language proficiency. Students analyze methods and strategies that are based on educational and second language learning theories to develop appropriate materials and lessons to use with children and adults at diverse levels of English Proficiency. This course is designed to meet the Pennsylvania Department of Education Standards for initial teacher certification, and/or ESL/ELL Program Specialist Certification for instructional materials/ development. May be offered in traditional and distance education formats. Prerequisites: None. Three hours lecture per week.	LEC	3	3
AUDSLP	495	HIS I ASLP	Independent study, under guidance of a faculty mentor, of a substantial research or creative topic. PREREQUISITES: Introduction to Honors Research	IND	3	3
AUDSLP	497	AUDSLP ELL PROF & FLD	Provides pre-service/public school educators (including speech-language pathologists who support English Language Learners (ELLs) in educational settings) with content that focuses on the development of a well-informed and practice-based philosophy of teaching and learning of English as a Second Language (ESL). This practicum course provides those who are planning to teach ESL in the public and private school settings, clinics, and/or basic adult education an opportunity to interact with ESL teachers and students in the classroom. Practicum students will acquire an understanding of the world of ESL, including the challenges confronting teachers, students, administration, as well as the resources available to deal with these challenges. Through classroom observations, class discussions, written assignments, and a sixty-hour hands-on practicum, students will have opportunities to build on their current understandings of the ESL teaching-learning process. This course is designed to meet the ESL Program Specialist certification competency domain t or Professionalism and Field Experience. Three hours lecture per week. Prerequisites: AUDSLP.415, AUDSLP.420, AUDSLP.432, AUDSLP.425.	LEC	3	3
AUDSLP	520	ELL:CULT AWARE&SENS	Must be an Audiology/Speech Pathology Major.	LEC	3	3
AUDSLP	532	COMM/ED ELLS	Provides students with the tools necessary to design standards aligned, authentic, communicative ELL instructional program materials to facilitate English language proficiency. Students analyze methods and strategies that are based on educational and second language learning theories to develop appropriate materials and lessons to use with children and adults at diverse levels of English Proficiency. This course is designed to meet the Pennsylvania Department of Education Standards for initial teacher certification, and/or ESL/ELL Program Specialist Certification for instructional materials/ development. May be offered in traditional and distance education formats. Prerequisites: None. Three hours lecture per week.	LEC	3	3

AUDSLP	550	APHASIA	This course focuses on primary disorders of language in adults associated with focal brain damage with emphasis on aphasias. Etiologies and characteristics of language/nonlanguage disturbances associated with lesions to the dominant and non-dominant hemispheres are discussed. Principles and methods of prevention, assessment, intervention and counseling are presented. Prerequisite: Graduate Enrollment in Speech Pathology. Three hours lecture per week.	LEC	3	3
AUDSLP	558	CLINIC PRACT & ISSUE	This first in-house clinic course prepares students in all aspects of clinical management to serve individuals with communication and swallowing disorders in the Bloomsburg University Speech, Language, and Hearing Clinic and off-campus sites. Students acquire necessary knowledge and skills in preparation for their field experiences in the professional community. Prerequisite(s): Graduate Enrollment in Speech Pathology.	CLN	3	3
AUDSLP	560	VOICE DISORDERS	This course provides an overview of the diagnosis and clinical management of functional and organic voice disorders. The focus of this course is on the perceptual and acoustic analysis of voice disorders, as well as a physiological view of voice therapy. Prerequisite: Graduate Enrollment in Speech Pathology. Three hours lecture per week.	LEC	3	3
AUDSLP	562	LANG DIS SCHOOL AGE	This course extends the study of normal language acquisition through adolescents and explores effects of language disorders on academic performance, especially literacy skills. Principles and methods of classroom-based assessment and intervention are presented. Cultural and educational issues are addressed. May be offered in traditional and distance education formats. Prerequisite: Graduate Enrollment in Speech Pathology.	LEC	3	3
AUDSLP	574	CLIN INST IN SP PATH	This course will provide the student with background information and experience with advanced clinical instrumentation used in the assessment and treatment of patients with speech, voice, and swallowing disorders. In addition, clinical experiences applying clinical instrumentation discussed in these lectures will also be implemented whenever possible. Prerequisite: Graduate enrollment in Speech Pathology. Three hours lecture per week.	CLN	1	1
AUDSLP	584	FIELD SPL 1	Field experiences extend preparation of students in all aspects of clinical management to serve individuals with communication and swallowing disorders at external sites within the professional community. Students acquire necessary knowledge and skills required for entry level practice in the profession. Prerequisite(s): Graduate Enrollment in Speech Pathology. Minimum grade no lower that B- in Clinical III.	CLN	3	3
AUDSLP	586	FIELD SPL 2	See course description for AUDSLP.584.	CLN	3	3
AUDSLP	597	AUDSLP ELL PROF & FLD	Provides pre-service/public school educators (including speech-language pathologists who support English Language Learners (ELLs) in educational settings) with content that focuses on the development of a well-informed and practice-based philosophy of teaching and learning of English as a Second Language (ESL). This practicum course provides those who are planning to teach ESL in the public and private school settings, clinics, and/or basic adult education an opportunity to interact with ESL teachers and students in the classroom. Practicum students will acquire an understanding of the world of ESL, including the challenges confronting teachers, students, administration, as well as the resources available to deal with these challenges. Through classroom observations, class discussions, written assignments, and a sixty-hour hands-on practicum, students will have opportunities to build on their current understandings of the ESL teaching-learning process. This course is designed to meet the ESL Program Specialist certification competency domain t or Professionalism and Field Experience.	LEC	3	3

AUDSLP	599	MASTERS THESIS	Provides an opportunity to employ accepted methods of empirical research in the solution or intensive study of some problem area of interest or concern in the area of Communication Sciences and Disorders (e.g., Speech Pathology or Audiology).	THE	1	3
AUDSLP	601	AUD REHAB ADULTS	Provide a study of all the related aspects in the provision of audiologic rehabilitation services to adults with hearing impairment. Includes such topics as models of audiologic rehabilitation, assessment and management, auditory training, speech-reading, auditory-visual integration, effective communication strategies, assistive technology, speech conservation, and Deaf culture. Prerequisites: Admission to and good standing in the Au.D. program.	LEC	3	3
AUDSLP	605	DIAG AUDIOLOGY 2	A comprehensive study of a variety of site of lesion tests. The course will cover acoustic immittance measures including tympanometry and acoustic reflex measures for detection of middle ear disorders and site of lesions in the auditory pathway. Other site of lesion tests include threshold and suprathreshold tone decay, loudness recruitment, loudness balance, Short Increment Sensitivity Index, Bekesy tests and brief tone audiometry. Test for detection of nonorganic hearing loss will also be discussed. Three hours lecture per week.	LEC	3	3
AUDSLP	606	ELECT & INSTRUM AUD	Solving practical equipment problems and understand the operation of equipment used in clinical practice and hearing services. Three hours lecture per week.	LEC	3	3
AUDSLP	607	INTERN: CLIN AUDIO	The Speech, Hearing, and Language Clinic of Bloomsburg University is an integral part of the teaching-training program of the Department of Audiology and Speech Pathology. The clinic provides outpatient diagnostic and therapeutic services for persons of all ages with speech, hearing, and language problems, including students and other members of the college community and residents of the Bloomsburg area. It serves as an extension of the classroom where students can apply and study evaluation procedures, therapeutic methods, techniques and materials, and the classification and etiology of speech and hearing disorders. The clinic provides the student with an opportunity to relate text and lecture information to actual clinical cases under the close supervision of certified staff. Students gain experience in all aspects of remediation diagnosis, therapy, counseling, report writing with a wide variety of clients. The clinic is necessary and inseparable from the existing course sequence. It becomes an important step in the development of a competent clinician, linking the classroom and theory with the clinical experiences, certification, and employment in the field. Internships are carried out within the Speech, Hearing and Language Clinic at Bloomsburg University.	CLN	1	3
AUDSLP	621	HEARING SCIENCE 2	This course will include the following aspects of auditory perception: Pitch perception, space perception, auditory pattern and object perception, speech perception. Practical applications of psychoacoustic phenomena will also be discussed. Prerequisite: AUDSLP.602. Three hours lecture per week.	LEC	3	3
AUDSLP	624	HA CONSID & FITTING	Clinical consideration and fitting practices will be analyzed and evaluated. This will include practical use and clinical application of acoustic modification and prescription methods in fitting hearing aids. Considerations for the evaluation, selection, and fitting of hearing aids for adults and children. The benefits of bilateral vs. monaural amplification and the verification of instrument gain measurements. Three hours lecture per week.	LEC	3	3

AUDSLP	626	INTERN: CLIN AUDIO	The Speech, Hearing, and Language Clinic of Bloomsburg University is an integral part of the teaching-training program of the Department of Audiology and Speech Pathology. The clinic provides outpatient diagnostic and therapeutic services for persons of all ages with speech, hearing, and language problems, including students and other members of the college community and residents of the Bloomsburg area. It serves as an extension of the classroom where students can apply and study evaluation procedures, therapeutic methods, techniques and materials, and the classification and etiology of speech and hearing disorders. The clinic provides the student with an opportunity to relate text and lecture information to actual clinical cases under the close supervision of certified staff. Students gain experience in all aspects of remediation diagnosis, therapy, counseling, report writing with a wide variety of clients. The clinic is necessary and inseparable from the existing course sequence. It becomes an important step in the development of a competent clinician, linking the classroom and theory with the clinical experiences, certification, and employment in the field. Internships are carried out within the Speech, Hearing and Language Clinic at Bloomsburg University.	CLN	1	3
AUDSLP	631	NEUROPHYS FOR AUDIOL	In order to provide comprehensive audiologic services to their patients, audiologists are required to have a working knowledge of numerous biological and technical processes. A strong knowledge base regarding the physiology of the structures involved in audition is especially important. An understanding of auditory neurophysiology is critical in the diagnosis of hearing loss, central auditory processing (CAP) disorders, and retrocochlear pathology; and the means by which audiologic tests can detect these phenomena. This course will provide the audiology doctoral student with basic neurophysiologic characteristics of neurons and those characteristics for the central and peripheral components of the auditory system. The students will also gain knowledge on how to integrate this information into the interpretation of routine clinical audiologic testing. Three hours lecture per week. Prerequisites: Currently enrolled and academic good standing in the Au.D. program.	LEC	3	3
AUDSLP	635	CLIN PHYS METH AUD	Study of the Electrophysiology techniques used to assess and diagnose cochlear and retrocochlear pathology and brainstem, spinal and nerve integrity. Review of theories and clinical applications of auditory brainstem evoked potentials, electrocochleography, SSEP and VEP.	LEC	3	3
AUDSLP	639	EVAL & MGT BAL DIS I	In order to provide comprehensive audiologic services to their patients, audiologists are often required to perform vestibular and balance assessments. The successful completion of a vestibular assessment requires the clinician to have an understanding of the anatomy and physiology of the systems being tested, the medical history of the patient, the techniques needed to perform the testing, and the way to properly interpret the test results. In addition, once the cause of the disorder is determined, understanding the techniques that are available for treatment will allow the clinician to assist in the treatment of the patient. This course is the first of a 2-course series designed to instruct the audiology doctoral student in the anatomy and physiology of the vestibular and balance systems, and the techniques used in a standard electronystagmography evaluation. In addition, the students will learn the pathophysiology of common vestibular and balance disorders. Three hours lecture per week.	LEC	3	3

AUDSLP	642	CLIN EXT/RES 2	An integral part of the teaching-training program is to have the student transition to hospitals; ENT practices, audiology practices, and medical clinics. This will enable the student to gain experience with a diverse population of clients (age, gender, pathology, social/economic, and race), equipment, and clinical/medical procedures. It is the bridge between the theoretical experience and being prepared for the workplace. The Council for Academic Accreditation requires that specific contact hours must be completed across five categories and two age groups. The total number of contact hours in these categories and age groups will be 2,000 to 3,000 hours. These hours must be acquired in three distinct sites or work environments and there must be a full-time 12-month residency experience. The clinical experience in this sequence of courses will be a graded transition. The first experience (638, 642, 646) will be half time external with academic courses. Experiences 647-648 will be full-time external. This will ensure the diversity and hours needed to be prepared for employment, licensure, and certification.	CLN	1	3
AUDSLP	644	ISSUES & PERSP AUD	Examine topics related to the professional practice of audiology including establishing a private practice, reimbursement, quality assurance, professional malpractice, marketing, business management, and the planning, organization, financing, and delivery of hearing health care. Explain an organizational structure of a business and the service delivery models in audiology. This course is offered to the graduate students in the Doctor of audiology program in an online/distance education format. Prerequisites: Currently enrolled and academic good standing in the Au.D. program.	LEC	3	3
AUDSLP	648	CLIN EXT/RES 5	An integral part of the teaching-training program is to have the student transition to hospitals; ENT practices, audiology practices, and medical clinics. This will enable the student to gain experience with a diverse population of clients (age, gender, pathology, social/economic, and race), equipment, and clinical/medical procedures. It is the bridge between the theoretical experience and being prepared for the workplace. The Council for Academic Accreditation requires that specific contact hours must be completed across five categories and two age groups. The total number of contact hours in these categories and age groups will be 2,000 to 3,000 hours. These hours must be acquired in three distinct sites or work environments and there must be a full-time 12-month residency experience. The clinical experience in this sequence of courses will be a graded transition. The first experience (638, 642, 646) will be half time external with academic courses. Experiences 647-648 will be full-time external. This will ensure the diversity and hours needed to be prepared for employment, licensure, and certification.	CLN	6	6
AUDSLP	651	FUNCT HU NEUROAUAT	Introduces students to functional human neuroanatomy of cerebral cortex, basal ganglia, thalamus/hypothalamus, brain stem, reticular formation, cerebellum, spinal cord, motor system, somatosensory system, limbic system, visual system, auditory/vestibular system, the blood supply of the nervous system, cranial nerves and peripheral nerves, autonomic nervous system, the meninges, ventricular system, and cerebrospinal fluid. Both the normal functioning and particular pathologies of these systems will be discussed with the emphasis on clinical vignettes to illustrate the concepts to facilitate the interpretation and memorization of essential neuroanatomic information. This course emphasizes the correlation between IONM and the function of the relevant anatomical structures. Prerequisites: Admission to and good standing in the Au.D. program.	LEC	1	3
AUDSLP	654	CLIN NEUROPHYS II	Familiarizes the student with the EEG knowledge and techniques used for brain monitoring and protection. This is a clinical neurophysiology and functional monitoring course specific to electroencephalography (EEG) monitoring during surgery. Neurophysiological basis of EEG recording, adult and pediatric EEG, Epileptic EEG, neurological and medical EEG, and neuropharmacological EEG will be reviewed and integrated with neural functional monitoring and protection during surgery. Prerequisites: Admission to and good standing in the Au.D. Program.	LEC	1	3

AUDSLP	655	IONM SKULL BASE SURG		LEC	1	3
AUDSLP	699	DOC THESIS IN AUD	Opportunity to employ accepted methods of research in the solution or intensive study of some problem area of interest or concern. The problem area selected for the research project must be related to Audiology. Three hours lecture per week.	THE	1	6
BIOLOGY	100	CELLS GENE MOLECULE	Presents basic concepts and unifying themes of biological science from the cellular, genetic and molecular levels. Discusses how biological data and ideas affect our lives. Not applicable to majors in biology or health sciences. Prerequisites: None. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Three hours lecture per week. May be offered online or on campus.	LEC	3	3
BIOLOGY	101	HUMAN BIOLOGY	Presents basic concepts and unifying themes of biology relating to humans. This course introduces non-majors to the scientific method, hierarchical organization of the human body, interrelationships between humans and the environment, organ systems, and human health-related issues. Not applicable to majors in biology or health sciences. Prerequisites: None. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Three hours lecture per week. Also offered online.	LEC	3	3
BIOLOGY	102	ECOLOGY & EVOLUTION	Presents basic concepts and unifying themes in ecological and evolutionary biology. Scientific and social applications of ecological and evolutionary theory will be stressed. Not applicable to majors in biology or health sciences. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Three hours lecture per week. Prerequisites: None.	LEC	3	3
BIOLOGY	114	CONCEPTS BIOLOGY 1	Provides a framework of key biological concepts and unifying themes. Topics include the nature and process of science, the unity and diversity of living things, the chemical basis of life, cell structure and function, principles of inheritance and animal form and function. Laboratory work emphasizes application of biological principles, experimental design, observation, data collection, analysis and interpretation. Prerequisites: None. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Three hours lecture/three hours laboratory per week.	LAB	4	4
BIOLOGY	114	CONCEPTS BIOLOGY 1	Provides a framework of key biological concepts and unifying themes. Topics include the nature and process of science, the unity and diversity of living things, the chemical basis of life, cell structure and function, principles of inheritance and animal form and function. Laboratory work emphasizes application of biological principles, experimental design, observation, data collection, analysis and interpretation. Prerequisites: None. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Three hours lecture/three hours laboratory per week.	LEC	4	4
BIOLOGY	115	CONCEPTS BIOLOGY 2	Presents key biological concepts in an evolutionary framework. Topics include plant form and function: population, community, and ecosystem ecology; evolution (including population genetics, macroevolution, and human evolution); and an introduction to principles of systematics. Laboratory work emphasizes application of biological principles, experimental design, observation, data collection, analysis, and interpretation as well as written and oral communication skills. This course is the second in a sequence of two introductory core courses for Biology majors. Prerequisite: BIOLOGY 114 (Concepts in Biology 1). Three hours of lecture and three hours of lab per week.	LAB	4	4

BIOLOGY	115	CONCEPTS BIOLOGY 2	Presents key biological concepts in an evolutionary framework. Topics include plant form and function: population, community, and ecosystem ecology; evolution (including population genetics, macroevolution, and human evolution); and an introduction to principles of systematics. Laboratory work emphasizes application of biological principles, experimental design, observation, data collection, analysis, and interpretation as well as written and oral communication skills. This course is the second in a sequence of two introductory core courses for Biology majors. Prerequisite: BIOLOGY 114 (Concepts in Biology 1). Three hours of lecture and three hours of lab per week.	LEC	4	4
BIOLOGY	173	ANATOMY PHYSIOL 1	Provides an introductory course integrating the structure and function of the human body. This portion covers: fundamental principles of anatomy and physiology, the chemical basis of life, cell structure and function, tissues, integumentary system, skeletal system, muscular system, nervous system, and special senses. This course is a required course for students majoring in Exercise Science, Nursing, Health Science, and Medical Imaging. Three hours of lecture and 3 hours of laboratory per week.	LAB	4	4
BIOLOGY	173	ANATOMY PHYSIOL 1	Provides an introductory course integrating the structure and function of the human body. This portion covers: fundamental principles of anatomy and physiology, the chemical basis of life, cell structure and function, tissues, integumentary system, skeletal system, muscular system, nervous system, and special senses. This course is a required course for students majoring in Exercise Science, Nursing, Health Science, and Medical Imaging. Three hours of lecture and 3 hours of laboratory per week.	LEC	4	4
BIOLOGY	174	ANATOMY PHYSIOL 2	Provides an introductory course integrating the structure and function of the human body. This portion covers: endocrine system, blood and defense mechanisms, cardiovascular system, lymphatic system, respiratory system, digestive system, metabolism, nutrition, urinary system, fluid and electrolyte balance, reproductive system, and growth and development. This course is a required course for majors in Exercise Science, Nursing, Health Science, and Medical Imaging. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIO 173 - Anatomy and Physiology.	LAB	4	4
BIOLOGY	174	ANATOMY PHYSIOL 2	Provides an introductory course integrating the structure and function of the human body. This portion covers: endocrine system, blood and defense mechanisms, cardiovascular system, lymphatic system, respiratory system, digestive system, metabolism, nutrition, urinary system, fluid and electrolyte balance, reproductive system, and growth and development. This course is a required course for majors in Exercise Science, Nursing, Health Science, and Medical Imaging. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIO 173 - Anatomy and Physiology.	LEC	4	4
BIOLOGY	205	INTRO TO NUTRITION	Provides a foundation of facts, concepts, and theories in the science of nutrition for all students, regardless of academic major. The nutritional information presented can be applied to personal lives and incorporated into the career of students. Examples include nutritional requirements to assure optimal health and physical performance throughout life and analyzing nutrition information in the media or the marketplace. Three hours of lecture per week. This course earns two GEPs toward Goal 9 Healthy Living in general education. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3

BIOLOGY	208	MEDICAL TERMINOLOGY	Studies origins, construction and application of medical language used in health professions. The course offers a word building system approach, a vocabulary of medical terms, abbreviations, symbols related to the body systems and interpretation of case studies and medical histories in order to develop effective communicative skills within diverse medical specialties. The course is designed to increase students' familiarity of medical language terms through a review of body systems and broad-based clinical applications. Prerequisites: Biology.173 and major in either Health Sciences or Medical Imaging. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 8 Second Language in general education.	LEC	3	3
BIOLOGY	230	HUMAN SEXUALITY	Presents an overview of the role and scope of sexuality in human life. Considers biological, anthropological, psychological and sociological aspects of sexuality. This course is intended as a survey and exploration of the basic nature of sexuality, from its physiological bases to its interpersonal ramifications. A major emphasis is placed upon mastering basic information in the natural sciences, intending to provide both the factual basis and the conceptual framework necessary for responsible citizenship. Not applicable to majors in biology or health sciences. Three hours lecture and one hour discussion per week. Prerequisites: None. This course earns one GEP towards Goal 5 Natural Sciences in general education and two GEP towards Goal 10 Citizenship in general education. Prerequisites: None.	DIS	3	3
BIOLOGY	230	HUMAN SEXUALITY	Presents an overview of the role and scope of sexuality in human life. Considers biological, anthropological, psychological and sociological aspects of sexuality. This course is intended as a survey and exploration of the basic nature of sexuality, from its physiological bases to its interpersonal ramifications. A major emphasis is placed upon mastering basic information in the natural sciences, intending to provide both the factual basis and the conceptual framework necessary for responsible citizenship. Not applicable to majors in biology or health sciences. Three hours lecture and one hour discussion per week. Prerequisites: None. This course earns one GEP towards Goal 5 Natural Sciences in general education and two GEP towards Goal 10 Citizenship in general education. Prerequisites: None.	LEC	3	3
BIOLOGY	233	HUMAN GENETICS	Provides the student with a basic foundation in human genetics. Fundamental principles of classical and molecular genetics are presented with a focus on their application to human inheritance and human disease. The social and ethical issues raised by progress in medical genetics are evaluated and discussed. This course is for Biology and Allied Health Sciences majors. Prerequisites: one of the following: BIOLOGY 114 and BIOLOGY 115, or BIOLOGY 173. The course meets for three hours lecture/discussion per week..	LEC	3	3
BIOLOGY	242	MICROBIOLOGY	Introduces the fundamental principles of taxonomy, microscopy, cell structure, cultivation, growth, metabolism, and genetics of the microbial world. Microbial interrelationships and control are examined along with the discussion of the role microbes play in the ecosystem, in public health, and in industry. This course is required for Biology and Health sciences majors. Prerequisites: BIOLOGY 114 (Concepts in Biology 1) and CHEM 115 (Chemistry for the Sciences 1); and either BIOLOGY 115 (Concepts in Biology 2) or BIOLOGY 173 (Anatomy and Physiology 1). Three hours of lecture and three hours of laboratory per week.	LAB	4	4
BIOLOGY	242	MICROBIOLOGY	Introduces the fundamental principles of taxonomy, microscopy, cell structure, cultivation, growth, metabolism, and genetics of the microbial world. Microbial interrelationships and control are examined along with the discussion of the role microbes play in the ecosystem, in public health, and in industry. This course is required for Biology and Health sciences majors. Prerequisites: BIOLOGY 114 (Concepts in Biology 1) and CHEM 115 (Chemistry for the Sciences 1); and either BIOLOGY 115 (Concepts in Biology 2) or BIOLOGY 173 (Anatomy and Physiology 1). Three hours of lecture and three hours of laboratory per week.	LEC	4	4

BIOLOGY	271	CELL BIOLOGY	Examines the structure and function of the cell and its organelles. Emphasis is placed on general principles and processes by which all cells function. This course is a required course for majors in B.S. Biology, B.S. Health Sciences, and certain options in B.A. biology. Three hours lecture/three hours laboratory per week. Prerequisites: BIO 114 (Concepts in Biology 1), CHEM 115 (Chemistry for the Sciences 1), and either BIO 115 (Concepts in Biology 2) or BIO 173 (Anatomy and Physiology 1).	LAB	4	4
BIOLOGY	271	CELL BIOLOGY	Examines the structure and function of the cell and its organelles. Emphasis is placed on general principles and processes by which all cells function. This course is a required course for majors in B.S. Biology, B.S. Health Sciences, and certain options in B.A. biology. Three hours lecture/three hours laboratory per week. Prerequisites: BIO 114 (Concepts in Biology 1), CHEM 115 (Chemistry for the Sciences 1), and either BIO 115 (Concepts in Biology 2) or BIO 173 (Anatomy and Physiology 1).	LEC	4	4
BIOLOGY	290	WRITING IN BIOLOGY	Provides experience in written and oral means of communication especially useful to students in a natural science. The course includes communication of information acquired by library research or classroom instruction as well as that acquired experimentally in the laboratory or the field. Finding, analyzing, evaluating, and presenting information from electronic and other sources are integral parts of the course. The course is designed for majors in biology and health sciences, but may also serve other students in the College of Science and Technology who meet the prerequisites. This course is not applicable as a biology elective. Three hours lecture per week. This course earns two GEPs toward Goal 1 Communication and one GEP toward Goal 2 Information Literacy in general education. Prerequisites: ENGLISH.101 and BIOLOGY 115 or ENGLISH.101, BIOLOGY.114 and BIOLOGY 173.	LEC	3	3
BIOLOGY	332	GENETICS	Addresses mechanisms of heredity in animals and plants, Mendelian inheritance, linkage, probability, crossing over, chromosomal modifications, nucleic acids, gene action, and genes in populations. The course is an upper-level course for biology majors and is presented in a series of lectures and discussions, of text book and problem assignments, and of laboratory experiments. The course is a core component in some of the biological and allied health degree programs and is an elective in others. Prerequisite: BIOLOGY 271 (Cell Biology). Three hours lecture and two hours of laboratory per week. Laboratory hours will vary.	LAB	3	3
BIOLOGY	332	GENETICS	Addresses mechanisms of heredity in animals and plants, Mendelian inheritance, linkage, probability, crossing over, chromosomal modifications, nucleic acids, gene action, and genes in populations. The course is an upper-level course for biology majors and is presented in a series of lectures and discussions, of text book and problem assignments, and of laboratory experiments. The course is a core component in some of the biological and allied health degree programs and is an elective in others. Prerequisite: BIOLOGY 271 (Cell Biology). Three hours lecture and two hours of laboratory per week. Laboratory hours will vary.	LEC	3	3
BIOLOGY	333	MOLECULAR BIOLOGY	Introduces the practical and theoretical aspects of molecular biology. The focus will be on the identification and analysis of recurring molecular motifs in the flow and regulation of information in biological systems. This course is for Biology and Allied health Sciences majors. Prerequisites: BIOLOGY 271 (Cell Biology). The course meets for three hours of lecture/discussion per week.	LEC	3	3

BIOLOGY	334	MOLECULAR BIOLOGY LAB	Introduces fundamental molecular biology techniques that are used in all branches of biology. Molecular techniques are instructed in the context of a semester-long research project in a research laboratory setting. Students begin their research projects with isolation of DNA and perform molecular techniques that purify, amplify, engineer, clone, and sequence nucleic acids to study their isolates. Research projects require group work and additional time outside of laboratory to maintain bacterial cultures. Three hours of lab per week. Prerequisite: BIOLOGY 271 (Cell Biology); BIOLOGY 333 (Molecular Biology) (pre- or co-requisite). Not offered every semester.	LAB	1	1
BIOLOGY	361	COMP VERT ANATOMY	Surveys form and function of chordate anatomy. Attention given to structure, morphogenesis, functional adaptations, evolutionary history and pattern. Laboratory emphasis is placed on the lamprey, shark and cat. This is an elective for Biology and Allied health Science majors; the course is open to other students meeting the prerequisite. Prerequisite: BIOLOGY 115 (Concepts in Biology 2) or BIOLOGY 174 (Anatomy and Physiology II). Two hours of lecture, 3 hours of laboratory per week.	LAB	3	3
BIOLOGY	361	COMP VERT ANATOMY	Surveys form and function of chordate anatomy. Attention given to structure, morphogenesis, functional adaptations, evolutionary history and pattern. Laboratory emphasis is placed on the lamprey, shark and cat. This is an elective for Biology and Allied health Science majors; the course is open to other students meeting the prerequisite. Prerequisite: BIOLOGY 115 (Concepts in Biology 2) or BIOLOGY 174 (Anatomy and Physiology II). Two hours of lecture, 3 hours of laboratory per week.	LEC	3	3
BIOLOGY	366	HEAD NECK & THORAX	Focuses on the anatomy, physiology and development of the head, neck and thorax. Emphasizes the organ systems that relate to the hearing and speech mechanisms. Three hours lecture/2 hours laboratory per week. Preference given to students in communication disorders. Not applicable to biology major.	LAB	3	3
BIOLOGY	366	HEAD NECK & THORAX	Focuses on the anatomy, physiology and development of the head, neck and thorax. Emphasizes the organ systems that relate to the hearing and speech mechanisms. Three hours lecture/2 hours laboratory per week. Preference given to students in communication disorders. Not applicable to biology major.	LEC	3	3
BIOLOGY	390	RESEARCH BIOL 1	Provides the opportunity for biology and allied health students to apply the scientific method and learn the techniques of scientific research, data collection, and analysis by engaging in an individualized program of research under the supervision of a faculty member. The research will culminate in a scholarly report written by the student, and the results will be presented at a scientific meeting or other appropriate venue. Prerequisite: Junior status (60 credits earned) and consent of instructor.	IND	3	3
BIOLOGY	391	RESEARCH IN BIO 2	Provides the opportunity for biology and allied health students to apply the scientific method and learn the techniques of scientific research, data collection, and analysis by engaging in a program of research under the supervision of a biology faculty member. The research will culminate in a scholarly paper written by the student, and the results will be presented at a scientific meeting or other appropriate venue. Prerequisite: BIO 390 (Undergraduate Research in Bio 1)	IND	3	3
BIOLOGY	411	RADIATION BIOLOGY	Studies effects of radiation on living organisms and nuclear structure; studies fundamental properties of radiation, including physical, chemical and genetic effects on plants and animals from cells to whole organisms; studies application of radiochemicals in biological studies. Prerequisite: BIOLOGY.233 or BIOLOGY.332, PHYSICS.111 or consent of the instructor.	LEC	3	3

BIOLOGY	411	RADIATION BIOLOGY	Studies effects of radiation on living organisms and nuclear structure; studies fundamental properties of radiation, including physical, chemical and genetic effects on plants and animals from cells to whole organisms; studies application of radiochemicals in biological studies. Prerequisite: BIOLOGY.233 or BIOLOGY.332, PHYSICS.111 or consent of the instructor.	LEC	3	3
BIOLOGY	421	ECOSYSTEM MANAGEMENT	Cultivates an understanding of the processes underlying functioning ecosystems, how humans have altered these processes and how this knowledge can be applied for more effective management and restoration of ecosystems at both local and landscape scales. This course is an elective for biology majors and is particularly relevant for those pursuing a B.S. in Biology with an option in Environmental Biology; it is open to other students meeting the prerequisites. Not offered every semester. Three hours of lecture/discussion per week. Prerequisites: BIOLOGY 115 (Concepts in Biology 2) and one of the following: BIOLOGY 351 (Ecology), EGGS 301 (Water Resources Management), EGGS 302 (Land Resources Management), EGGS 303 (Soil Resources Management).	LEC	3	3
BIOLOGY	435	BIOINFORMATICS	Presents analysis and manipulation of genomic sequence information to extract meaningful information about genes, gene structure, gene regulation, and gene evolution. A bioinformatics approach will be used to identify coding, non-coding, and regulatory sequences in a variety of plant and animal species. The course will focus on the kinds of information that can be extracted from large DNA sequences in order to understand gene function. Particular emphasis will be placed on understanding our genetic predisposition(s) to disease and the relationship of the human genome to the genomes of other organisms. This course is an elective for Biology majors. Prerequisites: MATH 141 (Introduction to Statistics), BIOLOGY 271 (Cell Biology), BIOLOGY 332 (Genetics) or BIOLOGY 333 (Molecular Biology). Three hours of lecture/computer laboratory per week. Not offered every semester.	LEC	3	3
BIOLOGY	451	CONSERVATION BIOLOGY	Presents the science of preserving biodiversity and sustaining the earth. The course draws on and synthesizes information from the fields of ecology, evolution, genetics, philosophy, economics, sociology and political science. Emphasis is placed on the development of strategies for preserving populations, species, biological communities and entire ecosystems in the face of growing human populations and their impact on the environment. The course brings scientific principles and theory to bear on problems of management for preserving the richness of life on earth. This course is an elective for Biology majors. Prerequisite: BIOLOGY 351 (Ecology). Three hours of seminar per week. Not offered every semester.	LEC	3	3
BIOLOGY	460	POPULATION BIOLOGY	Introduces students to current concepts in speciation, models of population structure and dynamics, and principles of population genetics. Stresses current research, theoretical and computational mathematical models, and current techniques in the study of populations. Weekend field trip component may entail additional student costs. This course is an upper-level elective course for Biology majors. Prerequisite: BIOLOGY 332 (Genetics) or BIOLOGY 351 (Ecology). Three hours of lecture/discussion per week. Not offered every semester.	LEC	3	3
BIOLOGY	470	MEDICAL PARASITOLOGY	Examines the life cycles and host-parasite relationships of human and animal parasites of medical importance. Laboratory focuses on the morphology and life cycles of parasitic protozoa, helminths, and arthropods. This is an elective for Biology and Health Sciences majors. Two hours lecture and three hours of laboratory/discussion per week. Prerequisites are BIOLOGY 242 (Microbiology) and BIOLOGY 271 (Cell Biology). Not offered every semester.	LAB	3	3

BIOLOGY	470	MEDICAL PARASITOLOGY	Examines the life cycles and host-parasite relationships of human and animal parasites of medical importance. Laboratory focuses on the morphology and life cycles of parasitic protozoa, helminths, and arthropods. This is an elective for Biology and Health Sciences majors. Two hours lecture and three hours of laboratory/discussion per week. Prerequisites are BIOLOGY 242 (Microbiology) and BIOLOGY 271 (Cell Biology). Not offered every semester.	LEC	3	3
BIOLOGY	474	HUMAN PHYSIOLOGY	Studies the major organ systems of the human body at the biochemical, cellular and organ levels; as well as emphasizing how the functions of individual organs systems are integrated with each other to maintain body conditions compatible with life. Systems covered include: endocrine, nervous, cardiovascular, respiratory, muscular and urinary systems. The immune, blood, and reproductive systems are not covered. This is an upper-level core course for Biology and Allied Health Science majors. BIOLOGY 271, or permission of the instructor. Three hours lecture and discussion per week.	LEC	3	3
BIOLOGY	476	NEUROPHYSIOLOGY	Examines normal physiology of the nervous and skeletal muscular systems; specifically studying cellular neurophysiology, sensory physiology, motor control and their integration. This is an upper-level elective course for Biology and Allied Health Science majors. Prerequisites: BIOLOGY 271 (Cell Biology) and BIOLOGY 174 (Anatomy and Physiology 2); or BIOLOGY 474 (Human Physiology), or BIOLOGY 480 (Comparative Animal Physiology). Three hours of lecture/discussion per week. Not offered every semester.	LEC	3	3
BIOLOGY	479	INTEGRATED PHYS LAB	Provides hands-on investigations of physiological principles across taxonomic groups and all organizational levels. The laboratory investigates evolutionary adaptations to various physical problems and reinforces awareness of the unity of living systems. Emphasis is placed on the application of the scientific method and provides opportunities for independent investigation. This is an upper-level core course for Biology and Health Sciences majors. Prerequisites: BIOLOGY 271 (Cell Biology); and (either as a prerequisite or concurrent) BIOLOGY 472 (Animal Cell Physiology), or BIOLOGY 474 (Human Physiology), or BIOLOGY 477 (Plant Physiology), or BIOLOGY 480 (Comparative Animal Physiology). Three hours laboratory per week, plus additional out of class assignments and/or quizzes.	LAB	1	1
BIOLOGY	479	INTEGRATED PHYS LAB	Provides hands-on investigations of physiological principles across taxonomic groups and all organizational levels. The laboratory investigates evolutionary adaptations to various physical problems and reinforces awareness of the unity of living systems. Emphasis is placed on the application of the scientific method and provides opportunities for independent investigation. This is an upper-level core course for Biology and Health Sciences majors. Prerequisites: BIOLOGY 271 (Cell Biology); and (either as a prerequisite or concurrent) BIOLOGY 472 (Animal Cell Physiology), or BIOLOGY 474 (Human Physiology), or BIOLOGY 477 (Plant Physiology), or BIOLOGY 480 (Comparative Animal Physiology). Three hours laboratory per week, plus additional out of class assignments and/or quizzes.	LEC	1	1
BIOLOGY	480	COMP ANIMAL PHYSIOL	Studies the adaptation of animals to their environments. Adaptive mechanisms for marine, freshwater, terrestrial and extreme environments will be examined using a combination of morphological, physiological, biochemical, molecular and evolutionary perspectives. The course will focus on a broad range of invertebrate and vertebrate animals with the goal of understanding the physiological and biochemical strategies they have evolved that allow them to successfully thrive within the uniqueness of each environment. This is an upper level core course for Biology and Health Sciences majors. Prerequisite 271 (Cell Biology). Three hours of lecture and discussion per week. Not offered every semester.	LEC	3	3

BIOLOGY	481	SR BIOLOGY SEMINAR	Addresses the practice of critical reading and of the scientific literature in biology, preparing written and oral analyses of original research, and engaging in critical discussion. One hour of seminar per week. Prerequisite: senior standing in biology.	LEC	1	1
BIOLOGY	490	INTERN BIO/ALL HL SC	Provides an application of biological knowledge through study, observation, and practice in an off-campus professional setting. A maximum of 3 credit hours may be applied toward the major.	SUP	3	15
BIOLOGY	494	HONORS IND STUDY 2	Consists of a laboratory or field investigation of a selected problem or topic in biology. The study will be conducted under the supervision of a biology faculty member. This course completes the requirements for Biology Honors research. Prerequisite: BIOLOGY.493.	IND	3	3
BIOLOGY	521	ECOSYSTEM MANAGEMENT	Cultivates an understanding of the processes underlying functioning ecosystems, how humans have altered these processes and how this knowledge can be applied for more effective management and restoration of ecosystems at both local and landscape scales. This course is an elective for biology graduate students. Not offered every semester. Three hours of lecture/discussion per week. Prerequisites: Admission to the M.S. Program in Biology.	LEC	3	3
BIOLOGY	535	BIOINFORMATICS	Presents analysis and manipulation of genomic sequence information to extract meaningful information about genes, gene structure, gene regulation, and gene evolution. A bioinformatics approach will be used to identify coding, non-coding, and regulatory sequences in a variety of plant and animal species. The course will focus on the kinds of information that can be extracted from large DNA sequences in order to understand gene function. Particular emphasis will be placed on understanding our genetic predisposition(s) to disease and the relationship of the human genome to the genomes of other organisms. Prerequisite: Admission to the M.S. program in biology. Three hours of lecture/computer laboratory per week. Not offered every semester.	LEC	3	3
BIOLOGY	551	CONSERVATION BIOLOGY	Presents the science of preserving biodiversity and sustaining the earth. Draws on and synthesizes information from the fields of ecology, evolution, genetics, philosophy, economics, sociology and political science. Emphasis on the development of strategies for preserving populations, species, biological communities and entire ecosystems in the face of growing human populations and our impact on the environment. The course brings scientific principles and theory to bear on problems of management for preserving the richness of life on earth. This is a graduate level course with three hours of lecture/seminar per week. Prerequisite: Admission to the M.S. program in biology. Not offered every semester.	LEC	3	3
BIOLOGY	560	POPULATION BIOLOGY	Introduces students to current concepts in speciation, models of population structure and dynamics, and principles of population genetics. Stresses current research, theoretical and computational mathematical models, and current techniques in the study of populations. Weekend field trip component may entail additional student costs. Three hours of lecture/discussion per week. Not offered every semester. Prerequisite: Graduate standing.	LEC	3	3
BIOLOGY	570	MEDICAL PARASITOLOGY	Examines the life cycles and host-parasite relationships of human and animal parasites of medical importance. Laboratory focuses on the morphology and life cycles of parasitic protozoa, helminths, and arthropods. This is a graduate level course for graduate students in Biology. Two hours of lecture and three hours of laboratory/discussion per week. Prerequisite is admission to the M.S. Biology program. Not offered every semester.	LAB	3	3

BIOLOGY	570	MEDICAL PARASITOLOGY	Examines the life cycles and host-parasite relationships of human and animal parasites of medical importance. Laboratory focuses on the morphology and life cycles of parasitic protozoa, helminths, and arthropods. This is a graduate level course for graduate students in Biology. Two hours of lecture and three hours of laboratory/discussion per week. Prerequisite is admission to the M.S. Biology program. Not offered every semester.	LEC	3	3
BIOLOGY	576	NEUROPHYSIOLOGY	Examines normal physiology of the nervous, and skeletal muscular systems; specifically studying cellular neurophysiology, sensory physiology, motor control and their integration. This is an upper-level elective course for Biology and Allied Health Science majors. Prerequisite: Admission to the M.S. program in biology. Three hours of lecture/discussion per week. Not offered every semester.	LEC	3	3
BIOLOGY	580	COMP ANIMAL PHYSIOL	Studies the adaptation of animals to their environments. Adaptive mechanisms for marine, freshwater, terrestrial and extreme environments will be examined using a combination of morphological, physiological, biochemical, molecular and evolutionary perspectives. The course will focus on broad range of invertebrate and vertebrate animals with the goal of understanding the physiological and biochemical strategies they have evolved that allow them to successfully thrive within the uniqueness of each environment. This is a graduate level course for graduate students with an undergraduate degree in the biological/life sciences. Prerequisite: Admission to the M.S. program in biology. Three hours of lecture and discussion per week. Not offered every semester.	LEC	3	3
BIOLOGY	593	MASTER OF SCI THESIS	Research and independent preparation of a formal thesis in partial fulfillment of the requirements for the Thesis Option within the Master of Science degree in Biology. May be enrolled in successive semesters for varying amount of credit, but no more than 6 credit hours applied toward satisfying the requirements for the Master of Science degree (Thesis Option) in Biology. Prerequisite: Admission to Candidacy for the Master of Science in Biology.	THE	1	9
BUSED	101	INTRO TO BUSINESS	Studies business and its environment, organization, operation, and the interrelationships with government and society. Business majors develop a broad base for further study in a specific area in business, while other majors will become familiar with the American enterprise system and issues facing business in today's global environment. May be offered in traditional and distance education formats. This course earns three GEPs toward Goal 6 Social Sciences in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3
BUSED	333	BUS COMM & RPT WRTG	Applies theories and principles of effective communication to solve common business problems. Psychological and organizational strategies will be used in the writing of business reports and other documents. This course is a required general education course for all Zeigler College of Business majors and cannot be used as a business elective except for non-Zeigler College of Business majors. Three hours lecture per week. Prerequisites: 45 credit and ENGLISH.101. This course earns two GEPs toward Goal 1 Communication and one GEP toward Goal 2 Information Literacy in general education.	LEC	3	3

BUSED	350	VALUE DIVERSITY BUS	Provides theories and practices in how diversity has impacted the workplace from historical, organizational, and global perspectives. It explores social identity, including cultural heritage, values, beliefs and prejudices. It also explores business culture and its development to understand the effects of privilege and oppression upon individuals, and remedies which can create an inclusive workplace and teach effective leadership including role modeling, mentoring, and rules of right. Valuing Diversity in Business is an elective course offered in the College of Business and satisfies General Education Requirements. Prerequisite: 60 credit hours. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Three hours lecture per week.	LEC	3	3
BUSED	402	INST STRAT-ASMT BCIT	This course emphasizes a variety of instructional strategies and assessment techniques for teaching business, computer and information technology courses. Prerequisites: Admission to teacher education program, Overall 3.0 GPA, schedule concurrently with BUSED 403. Three hours lecture per week.	LEC	3	3
BUSED	403	BCIT FIELD EXPER	Initiates an awareness of the teaching and learning atmosphere of the professional teacher in the classroom. Students provided opportunities to undertake the responsibilities assigned to a classroom teacher, including assuming some of the teaching role competencies. Must be scheduled the semester prior to student teaching. Prerequisite: Prerequisites: Admission to teacher education program, Overall 3.0 GPA, schedule concurrently with BUSED 402.	FLD	1	1
BUSED	404	PROF SEMESTER BCIT	Includes orientation experiences to observe the operation of a school and specific classes as well as 16 weeks of participatory teaching experiences correlated with classroom studies under full-time supervision. Prerequisites: Admission to Teacher Education and successful completion of BUSED.402 and BUSED.403. Schedule concurrently with BUSED.406.	FLD	12	12
BUSED	406	CLIN STUDY IN BCIT	Presents seminars on principles of education for business, computer and information technology teachers, instructional strategies for teaching business subjects, assessments and problems of classroom teaching. Classroom discussions closely correlated with the experiences of BUSED.404 and the four domains of the conceptual framework for professional practice. Prerequisites: Admission to Teacher Education and successful completion of BUSED.402 and BUSED.403. Schedule concurrently with BUSED.404.	LEC	3	3
BUSED	432	INTERNSHIP BUSINESS	Provides students with opportunities to acquire practical experiences in work situations in office systems. Prerequisites: Approval by department chairperson; GPA of 2.50 and 75 semester hours earned.	SUP	1	6
BUSED	502	INST STRAT-ASMT BCIT	Emphasizes a variety of instructional strategies and assessment techniques for teaching business, computer and information technology courses. Focus on developing engaging and active lesson plans that are student-centered and improve student learning. Student will design assessments and learning activities that involve collaborative learning techniques as well as assessment measurement tools. Various topics will include the four domains of professional practice and classroom management methods. Prerequisites: Graduate standing and admission into Teacher Education Certification in Business Computer Information Technology (BCIT). Taken concurrently with BUSED.503. May be offered in traditional and distance education formats.	LEC	3	3
BUSED	503	BCIT FIELD EXPER	Initiates an awareness of the teaching and learning atmosphere of the professional teacher in the classroom. Students provided opportunities to undertake the responsibilities assigned to a classroom teacher, including assuming some of the teaching role competencies. Must be scheduled the semester prior to student teaching. Prerequisites: Admission to teacher education program, Overall 3.0 GPA, scheduled concurrently with BUSED 502 - Instructional Strategies and Assessment in BCIT.	FLD	1	1

BUSED	504	PROF SEM IN BCIT	Provides opportunities for students to observe the operation of the secondary school environment and specific diverse classes as well as 16-weeks of participatory teaching experiences. This course is correlated with classroom studies under fulltime supervision. Prerequisites: Graduate standing AND admission into Teacher Education Certification in Business Computer Information Technology (BCIT). Taken concurrently with BUSED 506, Clinical Studies in BCIT.	FLD	9	9
CHEM	100	CHEM & THE CITIZEN	Introduces chemistry principles and the relevance of chemistry to the non-scientist. Themes for the course vary by instructor. Example themes include: chemistry and the environment, chemistry of food, and chemistry in human health. Although no previous experience with chemistry is required, students may be expected to do arithmetic and/or simple algebra. This course does not serve as a prerequisite for other chemistry courses and is not intended for science majors. This course earns three GEPs toward Goal 5 Natural Sciences in general education. May be offered in traditional and distance education formats. Prerequisites: None. Three hours of class per week.	LEC	3	3
CHEM	101	INTRO CHEMISTRY	Presents an introduction to chemistry for students with little or no previous chemical background. Develops the principles of chemistry from the ground level with an approach to meet the needs of students for general education and allied health emphasis including nursing. This course is not intended to be a beginning course for science majors. Prerequisites: None. This course earns one GEP toward Goal 3 Quantitative Reasoning and two GEPs toward Goal 5 Natural Sciences in general education. Three Hours Lecture Per week.	LEC	3	3
CHEM	105	INTRO FORENSIC SCI	Uses a case-oriented approach to explore selected topics of forensic science. These include: (1) the scientific and technological foundation for the examination of physical, chemical, and biological items of evidence, and (2) the scope of expert qualifications and testimony, the legal status of scientific techniques, and the admissibility of the results in evidence. This course is designed for students with an interest in forensic science. The course meets for one hour of lecture and three hours of laboratory per week. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: None.	LAB	3	3
CHEM	105	INTRO FORENSIC SCI	Uses a case-oriented approach to explore selected topics of forensic science. These include: (1) the scientific and technological foundation for the examination of physical, chemical, and biological items of evidence, and (2) the scope of expert qualifications and testimony, the legal status of scientific techniques, and the admissibility of the results in evidence. This course is designed for students with an interest in forensic science. The course meets for one hour of lecture and three hours of laboratory per week. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: None.	LEC	3	3
CHEM	108	PHYSIOLOGICAL CHEM	Surveys the essentials of organic chemistry and biochemistry with emphasis on the role of chemistry in human health. Includes bonding, structure, basic nomenclature, properties and reactions of organic functional groups and, structure, properties, and role of biomolecules. 3 hours lecture and 2 hours laboratory per week. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: CHEM.101 or CHEM.115.	LAB	4	4
CHEM	108	PHYSIOLOGICAL CHEM	Surveys the essentials of organic chemistry and biochemistry with emphasis on the role of chemistry in human health. Includes bonding, structure, basic nomenclature, properties and reactions of organic functional groups and, structure, properties, and role of biomolecules. 3 hours lecture and 2 hours laboratory per week. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: CHEM.101 or CHEM.115.	LEC	4	4

CHEM	115	CHEM FOR SCIENCES 1	Introduces and develops qualitative and quantitative concepts in chemistry essential for further study in chemistry and application to other science disciplines. Topics include the elements' atomic and periodic properties, chemical compound types and properties, chemical reaction types, chemical stoichiometry, molecular geometry determination and relation to properties, physical properties of states of matter, qualitative acid-base behavior, and inter-particle forces. Three hours per week class plus three hours per week laboratory. First course in chemistry for all physical and biological science majors. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: ALEKS score of 61 or MATH 109 or MATH 116. High school chemistry highly recommended.	LAB	4	4
CHEM	115	CHEM FOR SCIENCES 1	Introduces and develops qualitative and quantitative concepts in chemistry essential for further study in chemistry and application to other science disciplines. Topics include the elements' atomic and periodic properties, chemical compound types and properties, chemical reaction types, chemical stoichiometry, molecular geometry determination and relation to properties, physical properties of states of matter, qualitative acid-base behavior, and inter-particle forces. Three hours per week class plus three hours per week laboratory. First course in chemistry for all physical and biological science majors. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: ALEKS score of 61 or MATH 109 or MATH 116. High school chemistry highly recommended.	LEC	4	4
CHEM	116	CHEM FOR SCIENCES 2	Develops qualitative and quantitative concepts in chemistry essential for further study in higher level chemistry and application to other science disciplines. Topics include the colligative properties of solutions, chemical kinetics, equilibrium and acid-base behavior, thermochemistry and thermodynamics, and electrochemistry. Second course in chemistry for all physical and biological science majors. This course earns two GEPs toward Goal 3 Quantitative Reasoning and two GEPs toward Goal 5 Natural Sciences in general education. Three hours per week class plus three hours per week laboratory. Prerequisites: Grade of C or better in CHEM.115.	LAB	4	4
CHEM	116	CHEM FOR SCIENCES 2	Develops qualitative and quantitative concepts in chemistry essential for further study in higher level chemistry and application to other science disciplines. Topics include the colligative properties of solutions, chemical kinetics, equilibrium and acid-base behavior, thermochemistry and thermodynamics, and electrochemistry. Second course in chemistry for all physical and biological science majors. This course earns two GEPs toward Goal 3 Quantitative Reasoning and two GEPs toward Goal 5 Natural Sciences in general education. Three hours per week class plus three hours per week laboratory. Prerequisites: Grade of C or better in CHEM.115.	LEC	4	4
CHEM	232	ORGANIC CHEMISTRY 2	A continuation of organic topics, building on those covered in CHEM.231. Spectroscopy and the applications toward structure determination are introduced. Emphasizes reaction mechanisms, stereochemistry, syntheses and analyses of representative compounds. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and four hours of lab per week. Prerequisite: CHEM.231.	LAB	4	4
CHEM	232	ORGANIC CHEMISTRY 2	A continuation of organic topics, building on those covered in CHEM.231. Spectroscopy and the applications toward structure determination are introduced. Emphasizes reaction mechanisms, stereochemistry, syntheses and analyses of representative compounds. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and four hours of lab per week. Prerequisite: CHEM.231.	LEC	4	4

CHEM	251	INORGANIC CHEMISTRY	Explores theories and principles of inorganic chemistry: basis coordination chemistry, solid structures, periodic properties, descriptive chemistry of selected elements; computational applications to inorganic chemistry. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisite: CHEM.116 and CHEM.230 or CHEM.231.	LEC	3	3
CHEM	281	INTRO CHEMICAL LIT	Applies current technologies to find, evaluate, and ethically use chemical and scientific information. The course is intended for students who will become practicing chemist, or who will use chemistry in related fields of science and medicine. One hour of lecture per week plus mandatory chemistry seminar attendance. This course earns one GEP toward Goal 2 Information Literacy in general education. Prerequisite: CHEM.231.	LEC	1	1
CHEM	322	INSTRUM ANALYT CHEM	Presents the theory and laboratory applications of common methods of instrumental analysis. Topics include spectrophotometry, chromatography, mass spectrometry, nuclear magnetic resonance and electrochemistry. A laboratory centered course. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and 4 hours of laboratory per week. Prerequisites: CHEM.321 and CHEM.361.	LAB	4	4
CHEM	322	INSTRUM ANALYT CHEM	Presents the theory and laboratory applications of common methods of instrumental analysis. Topics include spectrophotometry, chromatography, mass spectrometry, nuclear magnetic resonance and electrochemistry. A laboratory centered course. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and 4 hours of laboratory per week. Prerequisites: CHEM.321 and CHEM.361.	LEC	4	4
CHEM	333	ADV ORGANIC CHEM	Introduces advanced topics and current research in organic chemistry, with an emphasis on material drawn from the primary literature. Due to the nature of this course, its content will vary. Three hours lecture per week. Prerequisite: CHEM 232 with a C or better.	LEC	3	3
CHEM	341	BIOCHEMISTRY 1	Emphasizes the structure, reactivity, and metabolic reactions of the naturally occurring biomolecules. Introduces the biochemical techniques encountered by the modern biochemist. Three hours of lecture and 4 hours of laboratory per week. This course earns one GEP toward Goal 1 Communication in general education. Prerequisites: CHEM.116 and either CHEM.230 or CHEM.232.	LAB	4	4
CHEM	341	BIOCHEMISTRY 1	Emphasizes the structure, reactivity, and metabolic reactions of the naturally occurring biomolecules. Introduces the biochemical techniques encountered by the modern biochemist. Three hours of lecture and 4 hours of laboratory per week. This course earns one GEP toward Goal 1 Communication in general education. Prerequisites: CHEM.116 and either CHEM.230 or CHEM.232.	LEC	4	4
CHEM	362	PHYSICAL CHEMISTRY 2	Continuation of CHEM.361; X-ray crystallography, quantum mechanics, spectroscopy, and statistical mechanics. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and 4 hours of laboratory per week. Prerequisite: CHEM.361.	LAB	4	4
CHEM	362	PHYSICAL CHEMISTRY 2	Continuation of CHEM.361; X-ray crystallography, quantum mechanics, spectroscopy, and statistical mechanics. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and 4 hours of laboratory per week. Prerequisite: CHEM.361.	LEC	4	4

CHEM	442	BIOCHEMISTRY 2	Continuation of CHEM.341; amino acid metabolism, photosynthesis, nucleotide metabolism, replication, transcription, translation, control of gene expression, molecular physiology. Laboratory to emphasize enzyme isolation and molecular biology techniques. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and 3 hours of laboratory per week. Prerequisites: CHEM.341 or equivalent or consent of the instructor. Graduate credit in biology program.	LAB	4	4
CHEM	442	BIOCHEMISTRY 2	Continuation of CHEM.341; amino acid metabolism, photosynthesis, nucleotide metabolism, replication, transcription, translation, control of gene expression, molecular physiology. Laboratory to emphasize enzyme isolation and molecular biology techniques. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture and 3 hours of laboratory per week. Prerequisites: CHEM.341 or equivalent or consent of the instructor. Graduate credit in biology program.	LEC	4	4
CHEM	492	CHEMICAL RESEARCH 1	Introduces chemistry and chemistry-related research methods as part of a semester-long project. Projects may entail a directed laboratory or computational investigation of one or more topics of interest to the student and instructor. The student will spend at least 42 hours of work on the project per credit hour. Prerequisite: Permission of instructor and the department of Chemistry and Biochemistry.	IND	3	3
CHEM	493	CHEMICAL RESEARCH 2	Continues instruction in chemistry and chemistry-related methods as part of a semester-long project. Projects may entail a directed laboratory or computational investigation of one or more topics of interest to the student and instructor. Projects may be a continuation of a project started in CHEM 492. The student will spend at least 42 hours of work on the project per credit hours. Prerequisites: CHEM 492 and permission of instructor and the Department of Chemistry and Biochemistry.	IND	3	3
CHINESE	102	CHINESE 2	Develops further the four language skills: speaking, listening, reading, and writing to a proficiency level regarded as basic communication in Chinese. CHINESE.102 is for students who wish to continue studying Chinese at the second level. Chinese language study is taught in its cultural context, including history, culture, diversity, and comparison with students' native culture. Practice in language laboratory and/or use of electronic language-learning media is required. CHINESE.102 is offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 8 Second Language in general education. Three hours lecture per week. Prerequisite: CHINESE.101 or equivalent proficiency level. This course is generally appropriate for students with one or two years of high-school Chinese.	LEC	3	3
CHINESE	204	CHINESE IV	Continuation of CHINESE.203; develops the four language skills in speaking, listening, reading, and writing; develops cross-cultural awareness; stresses practice of conversation and grammar in authentic context; with the expectation of Intermediate-mid to Intermediate-high level of proficiency upon the conclusion of the course. Literature and popular culture materials are introduced in the target language. Intended for students who have completed CHINESE 203, or equivalent. CHINESE 204 is a required course for the CHINESE Major and Minor, but is open to all students. Course carries 2 GEPs toward General Education Goal 1 - Communication and 1 GEP toward Goal 4 - Cultures and Diversity. Prerequisites: CHINESE 102 or equivalent placement on the Chinese Language Placement Test or ACTFL.	LEC	3	3
COMMDIS	502	LANG DIS SCHOOL-AGE	This course helps prepare speech-language pathologists to evaluate and manage communication disorders in school-age children in collaboration with families, educators, and other related service providers. The course will facilitate student application of research to practice, development and evaluation of program practices, and implementation of appropriate practices for school-age children to enhance communication development. Prerequisites: Admission into Graduate Program.	LEC	3	3

COMMDIS	508	PROF ISSUES 2	This course examines the fundamentals of behavioral and cognitive theory. Emphasis will be placed upon application in school settings and associated with the delivery of services to speech-language disordered clients. Prerequisites: Admission into Graduate Program.	LEC	1	1
COMMDIS	510	FLUENCE/CHILD	The course will cover the development, diagnosis and treatment of fluency disorders including stuttering, cluttering and neurogenic, psychogenic, and language based disfluencies. Emphasis is placed on stuttering assessment and intervention in children. Prerequisites: Admission into Graduate Program.	LEC	3	3
COMMDIS	514	COMM DIS OF HI	The course will equip the student to provide speech and language intervention to the hearing impaired child. Content will cover types and degrees of hearing loss and their speech, language and educational implications. Amplification systems will be discussed along with classroom modifications. Specific assessment and intervention strategies appropriate for the educational environment will be explained. Roles of various personnel working with hearing impaired children will be identified. Prerequisites: Admission into Graduate Program.	LEC	2	2
COMMDIS	521	PRACTICAL EXPERIENCE	This first practical experience prepares students in all aspects of clinical management to serve students with communication and swallowing disorders in the school setting. Students acquire necessary knowledge and skills in preparation for their student teaching experience. Prerequisites: Admission into Graduate Program.	CLN	1	1
COMMDIS	522	STUDENT TEACH	The student teaching experience allows students to apply information and concepts learned regarding the clinical management of students with communication and swallowing disorders in the school setting. This is the culminating practical experience of the graduate program in school-based speech-language pathology. Prerequisites: Have passed 5 credits of COMMDIS.521.	FLD	4	4
COMMSTUD	102	INTRO COMM STUDIES	Introduces students to the field of communication studies by providing an overview of major areas of research, highlighting the relevance of key disciplinary concepts to the analysis of human communication in everyday life. Students will learn about both established scholarship and emergent trends in the field. Completion of the course will yield a broad overview of the discipline and a basic understanding of its theories and methods. This large lecture course is open to all students. This course earns three GEPs toward Goal 6 Social Sciences in general education. Prerequisites: None.	LEC	3	3
COMMSTUD	103	PUBLIC SPEAKING	Introduces students to the verbal, nonverbal, and organizational skills necessary for giving effective public presentations. Students will learn the theory and principles of effective public speaking and practice these principles by performing and analyzing speeches. Students will complete at least three major speaking assignments. This course earns three GEPs toward Goal 1 Communication in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3
COMMSTUD	104	INTERPERSONAL COMMUN	Introduces students to the process of interpersonal communication. Students will explore the role of conversations and relationships to enhance their participation in daily interactions and their critical awareness of the process. Topics will includes the interconnections between identity and communication, language, nonverbal communication, listening, and communication dynamics within relationships. This skills-based course typically includes lecture, discussion, and in-class or distance education. The course is open to all students.. This course earns three GEPs toward Goal 1 Communication in general education. Three hours lecture per week. Prerequisite: None.	LEC	3	3

COMMSTUD	106	SM GROUP COMM	Examines communication principles and practices for successfully leading and participating in small groups. Particular emphasis is placed on communication skills involved in navigating group relationships and group decision making processes. This course is open to all students. This course earns one GEP toward Goal 1 Communication, one GEP toward Goal 3 Analytical and Quantitative Skills and one GEP toward Goal 10 Citizenship in general education. Prerequisite: None. Three hours lecture per week.	LEC	3	3
COMMSTUD	207	COMM RES METHODS	Introduces students to the empirical research process in the field of Communication Studies. Students will learn the basics of empirical research including the planning of studies, quantitative designs, qualitative designs, nonparametric/parametric data analysis, interpretation of results, and scientific measurement of variables. This writing intensive course also introduces students to the process involved in conducting background research and reporting on empirical research. This course will be offered at least once per year. Three hours lecture per week. Prerequisites: COMMSTUD.103 or COMMSTUD.104 or permission of instructor.	LEC	3	3
COMMSTUD	209	EXAMINING COMM	Introduces students to the art of communication analysis and to a variety of critical approaches which help students negotiate their way through a world of messages that compete for attention, influence beliefs and decisions, promote social change, and craft cultural identities. This course is primarily designed for Communication Studies students as a required course for the major, but is open to other students with an interest in critical analysis of communication. Successful completion of ENGLISH 101 is recommended prior to enrolling in this writing-intensive course. Prerequisites: NONE	LEC	3	3
COMMSTUD	215	COMMUNICATION THEORY	Introduces foundational ideas related to theory and surveys theories of Communication Studies, both general theories and those specific to particular contexts such as interpersonal communication, rhetorical theory, organizational communication theory, and culture and communication. A wide range of readings reflects the multidisciplinary nature of contemporary Communication Studies. This is a survey course for all students in the major and any student interested in learning more about theory within the field of Communication Studies. Prerequisites: None.	LEC	3	3
COMMSTUD	220	INTERCULTURAL COMMUN	Explores communication in cultural contexts. Students will be exposed to general principles for communication across cultures, both international and domestic, with the goal of becoming competent communicators. In addition to dealing with "international" contacts such as exchange programs and orientation to travel abroad, and/or study abroad, the course will explore "co-cultural" variations--that is, similarities and differences of individuals within the United States, and cultural differences and similarities transnationally in race, gender, sexual orientation, age, and condition of disability. This course is open to all students and is offered at least once per year. May be offered in traditional and distance education formats. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisite: None. Three hours lecture per week.	LEC	3	3
COMMSTUD	307	COMM BUSINESS PROFS	Designed to survey and strengthen necessary written and oral communication skills for entry-level managers, employees, and communication professionals in business and professional settings. It emphasizes important skills from three basic communication areas: interpersonal and organizational, interviewing and group, and public. Three hours lecture per week. Prerequisites: COMMSTUD.104 Interpersonal Communication, or by permission of instructor.	LEC	3	3

COMMSTUD	309	GENDER ISSUES COMM	Presents a broad range of theories concerning the nature of differences in communication behavior among different genders and the presumed origins of such differences. It also explores a variety of topics in gender and communication including verbal and nonverbal communication; family and relationships; the workplace and the media; feminism and other social movements; and domestic and sexual violence. The primary focus is on U.S. society, but some historical and cross-cultural contrasts will also be explored. The course is designed for students in Communication Studies and the Gender Studies Minor and other students interested in issues related to gender. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisite: COMMSTUD.104: Interpersonal Communication; or by permission of instructor. Three hours lecture per week.	LEC	3	3
COMMSTUD	310	ORG COMM THEORY	Explores theoretical and practical aspects of how communication patterns develop in organizations, and what effect these patterns have on various organizational processes and outcomes. Students will examine specific communication issues relevant in all types of organizations as well as discussing contemporary issues which organizations face. This course will be offered fall and spring semesters. Three hours lecture per week. Prerequisites: Students must have completed COMMSTUD.104 or by permission of instructor Majors and Minors only.	LEC	3	3
COMMSTUD	313	CONFLICT MGMT & RES	Analyzes the role of communication in the generation, process, and management of destructive and constructive conflict on interpersonal, small group, organizational, and societal levels. Three hours lecture per week. May be offered in traditional and distance education formats. Prerequisites: COMMSTUD.104 or by permission of instructor.	LEC	3	3
COMMSTUD	321	ARGUMENT & ANALYSIS	Focuses on the techniques of reason-giving in communicative situations, analyzing controversial issues, the validity of claims and evidence, the detection of fallacies, and the ability to communicate a point of view and refute the contentions of others. This course is designed for Communication Studies students and other students interested in argumentation and analysis. Prerequisites: COMMSTUD.103 Public Speaking or by permission of instructor.	LEC	3	3
COMMSTUD	324	HEALTH COMMUNICATION	Examines communication that takes place in health contexts. The course covers topics such as communication and language barriers, narratives of illness/health in different cultures, health communication in marginalized communities (global and local), social support networks, and health campaigns. In addition, the course surveys current issues and future directions of health communication research and practice. This course is designed for Communication Studies students and other students with an interest in the connections between communication and health. Prerequisites: COMMSTUD.104 Interpersonal Communication or by permission of instructor.	LEC	3	3
COMMSTUD	407	INTERVIEWING	Allows students to explore the interview as a specific communication event, with its own rules, procedures and strategies. It acquaints students with a variety of interview contexts, such as selection, performance appraisal, informational, helping, sales, and health care, by blending current theory and research with practical skills and applications. In this applied course students will prepare and conduct interviews, and receive feedback on their oral and written performances. The course is primarily designed for Communication Studies majors/minors and Professional Communication minors. Three hours lecture per week. Prerequisites: Completion of either COMMSTUD.205 Understanding Social Influence or COMMSTUD 210 Organizational Communication Theory or COMMSTUD.215 Communication Theory, and completion of all core courses (COMMSTUD.103, COMMSTUD.104, COMMSTUD 106, COMMSTUD.207, COMMSTUD.209, COMMSTUD.220), or by permission of instructor. Majors must earn a minimum grade of C in COMMSTUD.207 and COMMSTUD.209 to take 400 level courses.	LEC	3	3

COMMSTUD	417	MEDIA AND VIS CULT	Evaluates communication in a variety of mediated contexts by learning theoretical concepts from media studies, visual rhetorical theory, and critical cultural studies and applying them to real-world examples. This course will be offered at least once per year. Prerequisites: Completion of COMMSTUD 205 - Understanding Social Influence, or COMMSTUD 210 - Organizational Communication Theory, or COMMSTUD 215 - Communication Theory and completion of all core courses (COMMSTUD 103, 104, 106, 207, 209 and 220) or by permission of instructor. Majors must earn a minimum grade of C in COMMSTUD 207 and COMMSTUD 209 to take 400 level courses.	LEC	3	3
COMMSTUD	420	NONVERBAL COMM	Provides an overview of the forms and functions of nonverbal communication including: distinctions between nonverbal and verbal communication, codes of nonverbal communication, the communication of emotions, sex and nonverbal communication, nonverbal immediacy, nonverbal communication in power and persuasion, and the role of nonverbal communication in deception. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisites: Completion of either COMMSTUD.205 Understanding Social Influence or COMMSTUD 210 Organizational Communication Theory or COMMSTUD.215 Communication Theory, and completion of all core courses (COMMSTUD.103, COMMSTUD.104, COMMSTUD 106, COMMSTUD.207, COMMSTUD.209, COMMSTUD.220), or by permission of instructor. Students must have earned a minimum grade of C in COMMSTUD.207 and COMMSTUD.209. Three hours lecture per week.	LEC	3	3
COMMSTUD	425	RELATIONAL COMM	Provides an in-depth analysis of theory and research relevant to close personal relationships. Students will explore contemporary research on issues germane to developing and escalating relationships, maintaining fair and satisfying relationships, and coping with relationship challenges. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisites: Completion of either COMMSTUD.205 Understanding Social Influence or COMMSTUD 210 Organizational Communication Theory or COMMSTUD.215 Communication Theory, and completion of all core courses (COMMSTUD.103, COMMSTUD.104, COMMSTUD 106, COMMSTUD.207, COMMSTUD.209, COMMSTUD.220), or by permission of instructor. Students must have earned a minimum grade of C in COMMSTUD.207 and COMMSTUD.209.	LEC	3	3
COMMSTUD	426	LEADERSHIP TEAM BLDG	Provides an intensive survey of theory and research pertaining to working in small task groups. The course includes a focus on practical knowledge required to become a productive participant and leader in small group contexts. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisites: Completion of either COMMSTUD.205 Understanding Social Influence or COMMSTUD 210 Organizational Communication Theory or COMMSTUD.215 Communication Theory, and completion of all core courses (COMMSTUD.103, COMMSTUD.104, COMMSTUD 106, COMMSTUD.207, COMMSTUD.209, COMMSTUD.220), or by permission of instructor. Students must have earned a minimum grade of C in COMMSTUD.207 and COMMSTUD.209.	LEC	3	3
COMMSTUD	427	STRATEGIC COMM	Invites students to explore the forms and practices of strategic communication and their influence on contemporary global society. Course participants will learn to plan, develop, and manage effective strategic communication plans for corporations, NGOs, or government agencies. Three hours lecture per week. Prerequisites: Completion of either COMMSTUD.205 Understanding Social Influence or COMMSTUD 210 Organizational Communication Theory or COMMSTUD.215 Communication Theory, and completion of all core courses (COMMSTUD.103, COMMSTUD.104, COMMSTUD 106, COMMSTUD.207, COMMSTUD.209, COMMSTUD.220), or by permission of instructor. Students must have earned a minimum grade of C in COMMSTUD.207 and COMMSTUD.209.	LEC	3	3

COMMSTUD	493	SP TOP INTER COMM	Explores a particular area of emphasis in the Interpersonal Communication track of Communication Studies. The topic area specified will be determined by the professor of record. Three hours lecture per week May be offered in traditional and distance education formats. Prerequisites: Completion of either COMMSTUD.205 or COMMSTUD.215, and completion of all core courses (COMMSTUD.103, COMMSTUD.104, COMMSTUD 106, COMMSTUD.207, COMMSTUD.209, COMMSTUD 210, COMMSTUD.220), or by permission of instructor. Majors must earn a minimum grade of C in COMMSTUD.207 and COMMSTUD.209 to take 400 level courses.	LEC	3	3
COMMSTUD	497	INTERN COMMUNICATION	Integrates classroom experience with practical work experience in industrial, business, non-profit, educational, or government work settings. Students must establish the academic integrity of their proposed experience and its relevance to course work in the major. This internship serves as the capstone experience for Communication Studies majors who meet the prerequisites. Prerequisites for applying for the Internship in Communication: minimum 2.5 GPA, scheduled to complete 80 credit hours, completion of core requirements for the major (COMMSTUD 103, COMMSTUD 104, COMMSTUD 106, COMMSTUD 207, COMMSTUD 209, COMMSTUD 220, and one of the following: COMMSTUD 205 or COMMSTUD 210 or COMMSTUD 215), and scheduled to complete three 300/400-level courses within the major, at least one of which is a 400-level course in the students' area of concentration.	SUP	3	9
COMPSCI	110	INTRO COMPUTER SCI	Presents an introduction to computers, how computers process and manage data, are controlled, and their use in problem solving. Fundamental concepts include hardware, I/O systems, data communications, usage of the World Wide Web, building web pages, and programming in a language such as JavaScript, Visual Basic, or Python. Applications such as word processing, spreadsheets, presentation software, and database are included. Three hours of lecture per week. Not appropriate for a student who has taken Computer and Information Systems MISCIS.150. Students may not earn credit for both courses.	LEC	3	3
COMPSCI	121	OBJ-ORIEN PROG JAVA	This course introduces students to object-oriented programming ideas and techniques using the Java programming language. Topics include: classes, objects, fundamental data types, control structures, class design, testing, debugging, and Java documentation. Students develop moderate length programs following the design guidelines presented in the course. Four hours of lecture per week.	LEC	4	4
COMPSCI	122	GRAPH INTERFACE JAVA	This course continues the study of object-oriented ideas and techniques using the Java language. Topics include arrays, interfaces and polymorphism, event handling, inheritance, graphical user interfaces, exceptions, and files and streams. Four hours of lecture per week. Prerequisite: COMPSCI.121.	LEC	4	4
COMPSCI	123	VISUAL BASIC 1	Visual Basic 1 provides an introduction to programming using Visual basic .Net. The course is designed for teaching students with little or no programming experience. Students are introduced to object oriented programming principles, event driven programming, and Graphical User Interface (GUI) design. The students learn the syntax of Visual basic.net language including data types, control structures, and object oriented programming concepts. The projects include creating games and event-driven applications that will allow users to access and manipulate data from sequential text files. Three hours of lecture per week.	LEC	3	3
COMPSCI	223	VISUAL BASIC 2	This course is a second course in programming with Visual Basic.Net programming language. All students are expected to have successfully completed 56.123- Visual Basic 1. The goal of this course is to provide the student with in depth knowledge for designing and implementing windows based event driven applications that access databases. Special attention is given to ADO.Net technologies that are used to develop real world applications. Students will also learn to work with Crystal Reports. Three hours of lecture per week.	LEC	3	3

COMPSCI	255	DATA STRUCTURE C++	This course focuses on the specification, design and implementation of linear data structures such as Arrays, Linked Lists, Stacks, Queues and hash tables. Students will use C++ language features for implementing solutions using these data structures. Students will also be introduced to the C++ Standard Template Library, recursion and exception handling. Three hours of lecture per week. Prerequisite: COMPSCI.240.	LEC	4	4
COMPSCI	330	COMP ORGANIZATION	This course surveys the organization of computer elements at the circuit level. Topics include Boolean algebra; digital logic, processor instruction sets, and Finite State Machine representations of algorithmic processes. Three hours of lecture per week. Prerequisite: COMPSCI.240.	LEC	3	3
COMPSCI	348	DATA MINING	The goal of this course is to understand the concepts and issues involved in data mining and learn how to apply current software for tree-structured data analysis to real-world problems. Three hours of lecture per week. Prerequisites: MATH.141 or MATH.241 and MATH.185 and COMPSCI.115 or COMPSCI.121.	LEC	3	3
COMPSCI	357	DATA BASE DESIGN	This course provides a comprehensive understanding of the key concepts and terminology in the theory and design of relational databases. Students learn to create Entity Relationship Diagrams (ERD), normalize database tables, and use Structured Query Language (SQL) and PL/SQL programming to create database structures, access and manipulate data. Three hours of lecture per week. Prerequisite: Any COMPSCI course numbered at or above COMPSCI.115 or WDD 170	LEC	3	3
COMPSCI	386	OPERATING SYSTEMS	A study of the foundations of modern operating systems along with the concurrent programming problems associated with these systems. Students will write and test their own solutions to some of these problems. Problems encountered in the development of all modern systems will be covered along with possible solutions. Three hours of lecture per week. Prerequisite: COMPSCI.221 and COMPSCI.255.	LEC	3	3
COMPSCI	410	COMPUTER GRAPHICS	Presents the basic principles for the design, use, and understanding of graphics systems. Hardware and software components of graphics systems are examined, with a major emphasis on creating and manipulating graphics displays using a software graphics package; the package includes standard computer graphics algorithms. Two and three dimensional graphics, animation, color, hidden line and hidden surface algorithms are studied in depth. Three hours of lecture per week. Prerequisites: MATH.225 and COMPSCI.255.	LEC	3	3
COMPSCI	457	ADV DATABASE DESIGN	This course is a continuation of Database Design I. The students are expected to know relational database terminology, Entity Relationship Modeling, and the basics of PL/SQL programming. This is a project course in which students learn advanced theoretical concepts in Database Design and PL/SQL programming. The course covers System Development Life Cycle (SDLC), the Database Life Cycle (DBLC), Transaction management and concurrency control, Data Warehousing and Database Administration. The course also covers advanced topics in PL/SQL programming such as writing stored procedures and functions, creating triggers and handling exceptions. Students are expected to complete a project that involves creating an application that uses Oracle Forms to access and manipulate data and generate reports. These projects are to be presented in class. Three hours of lecture per week. Prerequisite: COMPSCI.357.	LEC	3	3
COMPSCI	476	INTRO COMP NETWORKS	A hands-on introduction to concepts and issues of computer networks. Course introduces theoretical issues of general computer networks along with installation and configuration of a simple local area network. Computer and network hardware and software are surveyed. This course does not count as a computer science elective for computer science majors. Three hours of lecture per week. Prerequisites: programming course or equivalent experience.	LEC	3	3

COMPSCI	480	OBJ. OR. SOFTWARE E	This project course presents Object-Oriented Software Development techniques that allow a group of programmers to successfully complete a large software development project. Teams of three to five students complete a large software project that starts with understanding user requirements and finishes with a presentation of their final solution. Unified Modeling Language Notations are used by the students to construct and model their software project. Four hours of lecture per week. Prerequisites: COMPSCI.221 and Junior/Senior Standing.	LEC	4	4
COMPSCI	497	INTERNSHIP COMP SCI	Provides computer science majors with an opportunity to acquire meaningful and professional on-site training and learning experiences in computer science at an industrial, private, or business work place. Note: A student may, with departmental approval, apply a maximum a maximum of 3 credits of internship toward the fulfillment of the mathematics major. Each 1 academic credit requires 40 hours of supervised work. The total credits of all internship credits must not exceed 12 credit hours. Prerequisites: Students must establish adequate course preparation or relative experience for the proposed internship. Internship applications must be submitted one month before the internship begins and must be approved by the department chairman.	SUP	2	12
COUNSEL	508	APP TRAIN TECH COUNS	This course presents an overview of the assessment of individual differences through group tests and measurements. It develops competencies in selecting, administering, and interpreting group intelligence, aptitude, achievement, interest, and personality instruments. It also examines current research involving assessment relative to educational, social, and industrial settings. Prerequisite: COUNSEL.505. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	LEC	3	3
COUNSEL	510	GROUP COUNSELING	Examines group processes and their application to counseling. This course also offers practical experiences in facilitating and leading support groups in an educational organization. Students will also participate as a member in a group setting. Prerequisites: COUNSEL.500 or COUNSEL.501.	LEC	3	3
COUNSEL	515	ORGANZ AND DEVELOP	This course prepares students to function productively in entry level and mid-level supervisory positions within institutions/organizations that serve the needs of a specified group of persons. It stresses both theory and application as students experience the cyclical process of program development and modification. It also teaches selected leadership and management roles and functions in organizational settings, as well as proposal writing and working with grants. Prerequisite: COUNSEL.500.	LEC	3	3
COUNSEL	520	LIFE SPAN PSYCHOLOGY	Explores human development throughout the lifespan with a special focus on the school age and college years. Topics covered include physical, cognitive, and psychosocial aspects of human growth, development, and behavior. Emphasis will be placed on practical application of the course content to the counseling and student affairs professions. Students will develop an understanding of the personal-social nature and needs of Pre-K students up through college students and families at all developmental levels in multicultural contexts. Prerequisites: None. May be offered in traditional and distance education formats.	LEC	3	3
COUNSEL	525	MULTI COUNSELING	Focuses students' attention to the presence of personal resistance, biases, prejudices, stereotypes, judgmental thought processes, and racist tendencies in society and how that affects practicing counselors and student affairs professionals. The development of knowledge and understanding regarding characteristics and concerns of diverse populations, the attitudes and behaviors affected by dominant group membership, and the individual and group approaches/interventions appropriate within the multicultural helping settings will be explored. The course will also provide students with a comprehensive overview of the theoretical approach concerning knowledge, awareness, skills, and attitudes toward seeking mental health services that counselors and student affairs professionals will need in order to demonstrate multicultural competence. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3

COUNSEL	533	ISSUES IN EL. CNSLG	This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	LEC	3	3
COUNSEL	555	ISSUES IN SEC. CNSLG	Studies the incorporation of counseling programs into the total school community based on the frame work of the American School Counseling Association (ASCA) National Model. Contemporary issues are explored as they relate to reducing and eliminating barriers to educational opportunity for every student. Major societal and educational changes impacting students are investigated. The roles of a school counselor as a leader, consultant, collaborator, and coordinator are reviewed. May be offered in traditional and distance education formats.	LEC	3	3
COUNSEL	564	FOUND & FUNCTIONS CSA	Provides a comprehensive introduction to the field of college student affairs and its role in American higher education. This course examines the underpinnings of the college student affairs profession specifically, and higher education generally, including history, philosophy, roles, and functions. Students will also explore college student characteristics, analyze the influence of organizational type and culture on college students and the nature of student affairs work, and consider essential partnerships with stakeholders in college student affairs work. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
COUNSEL	565	ISSUES IN STUD AFFS	Examines and critiques an array of contemporary and historical issues in college student affairs specifically and higher education in general. This course has a special focus on ethical, legal and leadership issues and how these concepts relate to and influence various issues in college student affairs. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
COUNSEL	590	ED RESEARCH	Surveys various concepts, theories and methods related to research conducted in an educational setting. Students will review, analyze, critique and design research using quantitative, qualitative and mixed methods strategies. Critical analysis of existing research literature and research ethics are also presented. Students will develop and refine their educational writing through course assignments and completion of a comprehensive and professionally relevant final paper. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
COUNSEL	592	ASSESSMENT AND CSE	Provides a comprehensive examination of the experiences of postsecondary students including the nature and characteristics of the population, the effects and outcomes of college, the roles and responsibilities of student affairs practitioners in measuring programmatic outcomes, and step-by-step procedures for assessing learning outcomes. May be offered in traditional and distance education formats. Prerequisites: COUNSEL.590.	LEC	3	3
COUNSEL	597	PRACTICUM I	The Practicum I course serves as the introduction to the students' practicum experience. Students enrolled in Practicum I will be completing their second semester of field experience in the fall or spring semester. Students will spend between 15 and 25 hours per week at an elementary school, secondary school, or college/university campus. Students in this course have assumed the responsibilities of an independent school or college/university counselor having completed all requirements in the Practicum Orientation I course. The course instructor will conduct two site visits per semester for each student enrolled the Practicum I course. Prerequisites: COUNSEL.500, COUNSEL.502, COUNSEL.505, COUNSEL.508, COUNSEL.510, COUNSEL.512, COUNSEL.515, COUNSEL.520, COUNSEL.525, COUNSEL.590, COUNSEL.596 or approval by the program coordinator.	CLN	2	6

COUNSEL	598	PRACTICM SUPERVISION	The Practicum Supervision course is offered in conjunction with the students' practicum experience. Students enrolled in Practicum Orientation I, Practicum I or Practicum II will complete a portion of their fieldwork experience in the fall or spring semester. These students also receive supervision provided a full-time core faculty member at the university through this course. Students receive 1 hour and 45 minutes of group supervision per week and up to 16 hours of individual supervision per semester. Students are required to successfully pass both sections of the Counseling and Conceptualization Competency Examination (CCC) during the Practicum Supervision course to matriculate in the counseling program. Prerequisites: COUNSEL.500, COUNSEL.502, COUNSEL.505, COUNSEL.508, COUNSEL.510, COUNSEL.512, COUNSEL.515, COUNSEL.520, COUNSEL.525, COUNSEL.590 or approval by the program coordinator. Co-Prerequisites: COUNSEL.600, COUNSEL.602 or COUNSEL.604.	LEC	1	3
COUNSEL	599	FIELD EXP IN CSA	Exposes students to a comprehensive, pre-professional experience spanning two academic semesters for advanced graduate students in the College Student Affairs specialty within the counseling program. Students must complete 250 hours (per term) of supervised professional level work in a college student affairs department. Graduate students are required to secure their own field placement, which must be approved in advance by the instructor or the program coordinator, as appropriate. Periodic seminars, either online or in person, will be conducted to complement the practical experience. May be offered in traditional and distance education formats. Prerequisites: Completion of at least 18 credit hours in the Counseling program.	CLN	1	6
CRIMJUST	101	INTRO CRIMINAL JUST	Examines crime and the criminal justice system from a social science perspective: how the system operates in theory and practice, successful and failed criminal justice policy, and constraints faced by law enforcement agencies, courts and correctional facilities. Required of all criminal justice majors and minors. Multiple sections are offered each fall and spring semester. There are three hours of lecture per week. This course earns three GEPs toward Goal 6 Social Sciences in general education. No prerequisites. Open to all students.	LEC	3	3
CRIMJUST	200	CRIMINOLOGY	Discusses the major sociological, biological, and psychological explanations of crime and justice to provide a theoretical understanding of the discipline. Presents the scope of crime in the United States and other countries. Probes each major type of crime, drug crimes, and prostitution. May be offered through a traditional lecture or distance education format. Prerequisite: CRIMJUST.101 - Introduction to Criminal Justice.	LEC	3	3
CRIMJUST	230	POLICE AND SOCIETY	Examines law enforcement practices and problems, including the legal, political, and historical framework. Analyzes police organizations and their relationship with other criminal justice and social agencies. Explores individual and community aspects of police-society relations, police and minority groups, social change and law enforcement. Probes police discretion and its role within the police organization and its impact on society. May be offered through a traditional lecture or distance education format. Prerequisites: CRIMJUST.101 - Introduction to Criminal Justice.	LEC	3	3
CRIMJUST	255	CJ RESEARCH	Introduces students to social science research methods common in sociology and criminal justice. Finding, reviewing and critically evaluating research literature and exploring essential components in the design of ethical research projects are central. Quantitative techniques are emphasized but attention is given to other approaches as well (e.g., qualitative and evaluation research). Class time typically includes a mix of lecture, discussion, and/or in-class exercises. The course is required for sociology and criminal justice majors but is open to all students who have taken SOC 211 or CRIMJUST 101 and have an interest in social science research. Offered every fall and spring semester. This course earns one GEPs toward Goal 1 Communication and two GEPs toward Goal 2 Information Literacy in general education.	LEC	3	3

CRIMJUST	260	CJ STATISTICS	Introduces students to the logic of statistical inquiry in social science research. Students learn basic statistical concepts and techniques necessary to conduct quantitative research. The course is taught with lecture and in-class computation and involves learning to use statistical software. The course is required for sociology and criminal justice majors but is open to others that have taken SOC.255 or CRIMJUST.255 and have an interest in social science research. Offered every fall and spring semester. This course earns two GEPs toward Goal 3 Quantitative Reasoning in general education.	LEC	3	3
CRIMJUST	300	JUVENILE DELINQUENCY	Examines social pressures operative upon children and youth in American society, which lead to formation of delinquent personality. Discusses contemporary research on treatment and prevention, juvenile courts, clinics and correctional institutions, evaluation of theories, and other related concepts. This course is offered through a traditional lecture or distance education format. Prerequisites: CRIMJUST.101 - Introduction to Criminal Justice.	LEC	3	3
CRIMJUST	330	WHITE-COLLAR CRIME	Discusses the major types of individual and organizational white-collar crime. Explores individual white-collar crime including acts such as embezzlement, fraud, identity theft, computer crime, bribery and corruption, while organizational white-collar crime includes acts such as health and safety violations, large scale fraud and political corruption. Addresses the dynamics, the social causes, the legal responses and the prevention of white-collar crime. May be offered annually through traditional lecture or distance education format. Prerequisites: CRIMJUST.101 - Introduction to Criminal Justice & CRIMJUST.200 - Criminology.	LEC	3	3
CRIMJUST	340	CRIM INVEST	Analyzes a wide range of criminal investigation processes and techniques. Topics include the history and evolution of criminal investigation, theory and methodology of criminal investigation, as well as the legal influences on the development of the criminal investigation process. Discussion is centered upon methods applied in managing the investigation of persons and property crimes, case management and the specializations needed in order to successfully investigate criminal matters. This course is offered through a traditional lecture or distance education format. Prerequisites: CRIMJUST.230 - Police and Society.	LEC	3	3
CRIMJUST	410	CRIMINAL LAW	Examines criminal law from a combined social science and legal perspective. Focus is on the substantive law with a special emphasis on personal crimes, property crimes, and drug offenses. Students will sharpen their skills in case analysis, legal reasoning and legal research. May be offered through a traditional lecture or distance education format. Prerequisite: 12 credits in criminal justice or permission of the instructor.	LEC	3	3
CRIMJUST	430	SPEC TOPICS IN CJ	Study of a topic in criminal justice; topic varies with each presentation of the course.	LEC	3	3
CRIMJUST	470	CULTS & APOC MVMTS	Examines cults and apocalyptic movements, and their relationship to crime and violence. Utilizes case studies from the United States and elsewhere to examine other forms of group offending and collective violence. This course is interdisciplinary and draws on criminal justice, psychological, sociological, historical, and legal perspectives. May be offered through a traditional lecture or distance education format. Prerequisites: SOC 211 - Principles of Sociology.	LEC	3	3
CRIMJUST	495	CRIM JUST INTERNSHIP	Participate in an on-the-job apprenticeship in which students are exposed to the responsibilities, skills and activities necessary to accomplish a job in a criminal justice agency, including public and private, local, state and federal, investigatory and correctional agencies. Pass/fail only. Internships will be completed in accordance with current policies of the Center for Professional Development and Career Experience in securing affiliation agreements and with other institutional requirements. Prerequisites: 60 or more credits or permission of instructor.	SUP	3	9

DANCE	222	MODERN DANCE I/II	Focuses on exploring the many principles that make up the medium of modern dance. Through the application of repeated exercises, students will experience how the body becomes an instrument of expression, consciousness, and a tool for self-development. Through a progressive warm-up, across the floor movement patterns, and center combinations, this course will guide students to obtain a deeper physical knowledge base, build stronger mental clarity of vast concepts such as space, weight and time, and reveal the relationship between physics and working anatomical principles. Additionally, through studying the repertoire of professional modern companies, students will be able to recognize the elements that define modern dance and discuss the impacts of such works. Prior exposure to dance is required. Instructor approval will be given during the first week of classes to determine appropriate placement. Students must have completed EXERSCI.117 or have previous experience in either ballet, modern or jazz dance to register. This course counts as a Group A, Humanities and The Arts General Education Requirements/ This course will apply 1 credit toward satisfying the Fitness and Recreational Skills requirement. Prerequisites: Completion of EXERSCI.117 or previous dance experience.	SEM	3	3
DANCE	224	CHOREOGRAPHY I	Explores the process of making contemporary dance works in the studio setting. Through an artistic, intellectual and physical lens, students will experience/practice multiple approaches to the craft of dance making. Improvisational structures, text analysis, group discussions, choreographic studies and other varied assignments will lead students to develop the breadth of their choreographic voice via actively engaging in the process of dance making. Students will participate in peer feedback sessions, evaluating and de-constructing the work of all classmates. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisites: Completion of or concurrent enrollment in one of DANCE.221, DANCE.222, or DANCE.223, or approval of the instructor.	SEM	3	3
DANCE	228	ENSEMBLE (0-2)	Ensemble (0-3) - Provides a forum for the development of student choreography and/or research. Students will submit proposals to faculty for approval of specific projects such as creating, learning, researching, teaching and ultimately performing student dance works and/or masterworks. This course will focus on developing artistry, technique, leadership skills, a choreographic voice, communication skills, and the skills/knowledge required for the successful performance of dance works. A final public performance will be held at the end of the term showcasing the mentored projects, where appropriate. This course will apply 1 credit toward satisfying the Fitness and Recreational Skills requirement. Prerequisites: Completion of or concurrent enrollment in one of DANCE.221, DANCE.222, or DANCE.223 or approval of the instructor. This course may be repeated for credit without limit.	SEM	0	3
DANCE	229	REPERTORY	Repertory (3) - Focuses on the process of creating, learning and performing new faculty dance works, faculty repertoire and/or masterworks of selected guest artists and/or master artists. This course places emphasis on developing artistry, technique, and the skills required for performance. A final public performance will be held at the end of the term showcasing the works studied and/or rehearsed. This course counts as a Group A, Humanities and The Arts General Education Requirements/This course will apply 1 credit toward satisfying the Fitness and Recreational Skills requirement. Prerequisites: Completion of or concurrent enrollment in one of DANCE.221, DANCE.222, or DANCE.223 or approval of the instructor. This course may be repeated for credit without limit.	LEC	3	3

DANCE	290	SPECIAL TOPICS	Examines various special topics from an artistic, intellectual and physical approach. On a rotating basis, these topics may include Tap, Improvisation, The Alexander Technique, African Dance, Dance Pedagogy, or other, and will serve to add depth and diversity to the Dance Program. Students will explore these topics through various exercises, discussions, class films, choreographic studies, and texts as appropriate. Prior exposure to jazz, modern or ballet dance is preferred, and instructor approval will be given during the first week of classes to determine appropriate placement, as needed. This course counts as a Group A, Humanities and The Arts General Education Requirements/This course will apply 1 credit toward satisfying the Fitness and Recreational Skills requirement. Prerequisites: None (It is recommended that the student have previous jazz, modern or ballet dance experience.) May be repeated for credit without limit.	SEM	3	3
DEAFHH	201	HIST ED GUID DEAF/HH	Explores the education of deaf/hard of hearing individuals with emphasis on the history of educational procedures and guidance in communication, psychological and vocational habilitation. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: None.	LEC	3	3
DEAFHH	305	INST METH DEAF/HOH	Introduces the design of instructional procedures and methods of implementing curricula for education of the deaf/hard of hearing. Discusses and demonstrates traditional and innovative approaches to teaching. Three hours lecture per week. Prerequisites: DEAFHH.201.	LEC	3	3
DEAFHH	570	ST TCH DEAF HON	Evaluates hearing losses affecting the communicational, educational, and vocational adjustment of individuals through supervised observation, classroom practice, and practicum experience. Students are assigned to approved private and public programs for the deaf/hard of hearing and work with selected professionals in education of the deaf/hard of hearing, following the same schedules and responsibilities similar as professionals. Arrangements relating to student interest must be approved by program adviser. Permission of curriculum coordinator required.	FLD	6	6
DEVSTUDY	100	COLLEGE STUDY SKILLS	Focuses on the development and application of learning and study strategies that contribute to academic success. Learning strategies include techniques for note taking, studying of textual material, synthesizing course content, and preparing for and taking exams. The course is designed to support students in developing valuable study habits which will concentrate on critical thinking strategies and the individual's responsibility to learning. ENRICH 100 is a free elective and credit applies towards graduation. This course is open to all students. Prerequisites: NONE	LEC	1	1
DEVSTUDY	103	APMP	Introduces the mind as a limit and a possibility. Studies mindfulness practice as a tool for mastery orientations to learning in personal and professional endeavors. Investigates core beliefs and ethical perspectives informed by mindful awareness. The course can be offered both on-site and through perspectives informed by mindful awareness. This course earns one GEP toward Goal 4 Cultures and Diversity, one GEP toward Goal 6 Social Sciences and one GEP toward Goal 10 Citizenship In general education. Prerequisite: None.	LEC	3	3

DEVSTUDY	120	COL RDG/STUDY SKILLS	Focuses on complex reading and study skills essential for college learning and meeting academic demands of college. The course is intended for students who have adequate or advanced reading skills and strive to develop more efficient and effective critical reading, thinking, and study strategies. Students will also learn about vocabulary development, flexible reading rate, active reading techniques, and preparing for and taking exams. Analytical and critical reading skills (including topics such as evaluating sources, recognizing author's purpose, tone, and bias) are emphasized and applied to a wide variety of academic topics. This course is primarily lecture and discussion. A student may not take both ENRICH 100 - College Study Skills and ENRICH 120 College Reading and Study Skills concurrently. ENRICH 120 is a free elective and credits apply towards graduation. Prerequisites: NONE	LEC	3	3
DEVSTUDY	25	READING 2	Course presents major components of the reading process and emphasizes basic reading skills. A prerequisite for College Reading and Study Skills for students scoring below the established cutoffs on the Nelson Denny Reading Test. Three semester hours towards full-load status; grade counted in GPA. Does not apply toward graduation.	LEC	3	3
DEVSTUDY	60	WRITING 2	Required of students whose SAT-V scores fall below a standard set by the university and whose writing samples confirm need. Students refine basic writing skills in context of varied writing assignments that address given rhetorical situations. Assignments call for specific evidence and responsible generalization from that evidence. Class work may include conferencing, collaborative work, student presentations, reading and discussion as well as writing. Three semester hours towards full-load status; grade counted in GPA. Does not apply toward graduation.	LEC	3	3
DEVSTUDY	80	INTRODUCTORY ALGEBRA	Presents mathematical topics and applications in a context designed for students with minimal algebraic skills as evidenced by student preparation and results obtained in diagnostic tests. Introductory Algebra is designed to promote success in Intermediate Algebra. It is suitable for students who have a limited or no background in algebra. 1 to 2 lab hours may be required weekly. Grades earned in this course are factored in students GPA, however, the credits from this course do not apply toward graduation. Prerequisites: None; Entry by placement tests.	LEC	3	3
DEVSTUDY	90	INTERMEDIATE ALGEBRA	Presents mathematical topics and applications in a context designed to promote success in college level math courses. It is suitable for students who have a limited background in algebra. 1 - 2 lab hours may be required weekly. Grades earned in this course are factored in students' GPA, however, the credits from this course do not apply toward graduation. Prerequisites: Successful completion of Introductory Algebra or entry by placement tests.	LEC	3	3
DIGFOR	117	INTRO DIGITAL FRNSC	An introduction to the command line environment and the concepts and hardware needed to do elementary forensic analysis and data recovery on the FAT (File Allocation Table) systems using only a hex editor. Three hours of lecture per week.	LEC	3	3
DIGFOR	217	FILE SYSTEMS 1	An introduction to basic digital forensic methodology and analysis of File Allocation Table (FAT) file systems with an emphasis on forensic information from slack space, unallocated space and windows artifacts obtained using DOS tools and techniques. Three hours of lecture per week. Prerequisite: A grade of C- or better in DIGFOR 117 or COMPSCI 117	LEC	3	3

DIGFOR	218	FILE SYSTEMS 2	Continuation of File Systems 1 emphasizing basic forensic methodology and analysis in a variety of file systems (NTFS, HFS, ext2, ext3) with an emphasis on forensic information from slack space, unallocated space and windows artifacts obtained using DOS tools and techniques. Three hours of lecture per week. Prerequisite: A grade of C- or better in DIGFOR 217 or COMPSCI 217	LEC	3	3
DIGFOR	351	ENTER NETWORK INVEST	Develops the knowledge and skills for the forensic acquisition and analysis of enterprise networks such as cloud computing environments and enterprise application appliances. The use of logging correlation and the impact of legal considerations in investigations is included. Three hours lecture per week. Prerequisites: DIGFOR.317 and DIGFOR.275.	LEC	3	3
DIGFOR	417	ADV TOPICS IN D.F.	Performs advanced forensic methodology and simulated cases requiring imaging, chain of custody, analysis, report writing and testimony using a variety of windows tools and techniques. Three hours of lecture per week. Prerequisite: A C- or better in DIGFOR 318 (or permission of the instructor).	LEC	3	3
ECONOMIC	121	PRIN MACROECONOMICS	Develops basic concepts and tools of Macroeconomics. Topics include the nature of economic problems; economic concepts; institutional frameworks; supply, demand and the price system; national income accounting; determination of output and employment levels; consumption, saving and investment behaviors; inflation and unemployment; business cycles; monetary and fiscal institutions and theories; economic growth. This course targets a broad-based audience that includes but is not limited to freshmen. The goal of the course is to introduce students to the economic way of thinking and help them gain insight into how the economy works. May be offered in traditional and distance education formats. Prerequisites: None. This course earns three GEPs toward Goal 6 Social Sciences in general education. Three hours lecture per week.	LEC	3	3
ECONOMIC	122	PRIN MICROECONOMICS	Dedicated to understanding how individuals, groups, and firms make decisions about allocating their scarce resources (time, money, natural resources, etc.). In this course, undergraduate students from all majors investigate topics such as the determination of prices in a free market system, the analysis of taxation and government regulation and an examination of different market structures. They also see the sense in which market economies are efficient and the ways in which the government can make our economy less or more efficient. The goal of the course is to introduce students to the economic way of thinking and to help them gain insight into how the economy works. Required for Economics majors; open to all students. This course earns three GEPs toward Goal 6 Social Sciences in general education. Prerequisites: None. May be offered in traditional and distance education formats.	LEC	3	3
ECONOMIC	156	BUS & ECON MATH	Presents an introduction to basic mathematical tools frequently employed in Business and Economics, e.g., systems of linear equations, inequalities, logarithms, and mathematics of finance; and prepares students for the concepts of optimization. The course targets a broad-based audience that includes, but is not limited to freshmen. The course is one of the approved Foundational Mathematics courses and offer 3 GEPs for Goal 3. The goal of the course is to introduce to students how mathematics can be used to design, evaluate, and solve quantitative problems related to Business and Economics. Course may be offered face-to-face or distance ed.	LEC	3	3

ECONOMIC	221	MACRO-ECON THEORY	Stresses the national income analysis; theory of income determination, employment and price levels; monetary and fiscal institutions; theory and policy; investment, interest and demand for money; business cycles; inflation and unemployment; national debt; macroeconomic equilibrium; prices, wages and aggregate supply, economic growth, foreign trade and balance of payments; economic policy. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisites: ECONOMIC.122 or ECONOMIC.212, ECONOMIC.121 or ECONOMIC.211 and ECONOMIC.156 or MATH.123 or MATH.125.	LEC	3	3
ECONOMIC	222	MICRO & MANAGERIAL	Reviews the theory of consumer behavior and the firm; output and price determination under different market systems; pure competition, pure monopoly, oligopoly and monopolistic competition; production and cost analysis; allocation of resource and distribution of income; comparison of behaviors of competitive, monopolistic and oligopolistic product and resource markets; constrained and nonconstrained optimization techniques and their applications to business decisions and business practices; welfare economics. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisites: ECONOMIC.122 or ECONOMIC.212, ECONOMIC.121 or ECONOMIC.211 and ECONOMIC.156 or MATH.123 or MATH.125.	LEC	3	3
ECONOMIC	256	BUS & ECON STAT 1	Studies the organization and presentation of data, descriptive statistics, elements of probability and probability distributions, sampling and sampling distributions, estimation and hypothesis testing, and correlation as applied to business and economic problems. The course will introduce students to the presentation and analysis of business and economic data. The method of instruction is based on lecture, discussion and problem solving. The course is required for majors. Three hours lecture per week. This course earns three GEPs toward Goal 3 Quantitative Reasoning in general education. Prerequisites: ECONOMIC.121 or ECONOMIC.122.	LEC	3	3
ECONOMIC	313	LABOR ECONOMICS	Presents the economics of the labor market, the supply of and demand for labor, the nature of theory and wages, productivity and inflation, unionism, theories of the labor movement, collective bargaining and public policy. A major focus is the relationship between labor markets and gender and racial issues. For each of the economic issues, the implications with respect to gender and race will be examined. The goal of the course is to introduce students to economic analysis and empirical data which emphasize Labor Market differences by race, gender and international comparisons. The method of instruction is based on lecture, discussion and problem solving. This course serves as an Economic elective and is open to all majors. Three hours lecture per week. This course earns two GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisites: ECONOMIC.121 and ECONOMIC.122.	LEC	3	3
ECONOMIC	327	MONEY & BANKING	Reviews the historical background and the development of monetary practices and principles of banking; special attention given to commercial banking and credit regulations and current monetary and banking development. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: ECONOMIC.121 or ECONOMIC.211 and ECONOMIC.122 or ECONOMIC.212.	LEC	3	3
ECONOMIC	333	INTERNATL ECONOMICS	Addresses the pure theory of international trade. Outlines the gains from trade; free trade and protection; balance of payments; foreign exchange and capital movements; the dollar and the international monetary system and international liquidity shortage. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Prerequisite: ECONOMIC.121 or ECONOMIC.211 and ECONOMIC.122 or ECONOMIC.212.	LEC	3	3

ECONOMIC	456	INTRO ECONOMETRICS	Applies modern statistical methods to economic problems; time series and cross-sectional analysis of measurements of demand and costs; macroeconomics models; income distribution and growth model. This course does not count as a Group B general education requirement. Three hours lecture per week. Prerequisite: ECONOMIC.121 or ECONOMIC.211 and ECONOMIC.122 or ECONOMIC.212 and ECONOMIC.256.	LEC	3	3
ECONOMIC	460	ADV POL ECONOMY	Applies economic and political models of social decision making to historical problems from local through international levels. Presents an evaluation of market; political and mixed techniques in particular areas from the 18th through the 20th centuries. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: ECONOMIC.121 or ECONOMIC.211 and ECONOMIC.122 or ECONOMIC.212.	LEC	3	3
EDFOUND	204	EDUC TECHNOLOGY	Presents the use of technology as a tool to improve the teaching and learning processes. The methodologies and materials used in the course are updated each semester according to current trends, practices, and research in the field of Educational Technology. In addition, technologies used in the course will be the same technologies that are used and available in the PK-12 schools. Although the computers used in this course are primarily PCs, students will also be exposed to the Macintosh platform. Students will also explore other technology devices for the classroom as they become available. It also meets the International Society for Technology in Education (ISTE) National Educational Technology Standards for pre-service teachers. This course earns three GEPs toward Goal 2 Information Literacy in general education. Three hours lecture per week. Prerequisites: None.	LEC	3	3
EDFOUND	251	PSYCH FOUND OF EDUC	A systematic analysis of theories of human motivation, development and learning related to the teaching-learning process. Psychological systems are compared and evaluated in terms of their philosophical bases, ideological commitments and as criteria for the development of models for educational policy and practice. Three hours lecture per week.	LEC	3	3
EDFOUND	291	PRIN OF TEACHING	Introduces students to the teaching process. Diverse instructional strategies and techniques, methodologies, and approaches are explored. Topics include: (1) the manner in which personal characteristics, experience and preparation, context in teaching, the changes in society, and student diversity influence how we teach, (2) developing instructional objectives, sequencing learning activities, and applying various taxonomies while conducting microteaching lessons, and (3) discipline strategies, questioning techniques, differentiated learning activities, and mastery teaching. Class term project includes a unit plan and an evaluative instrument. Three hours lecture per week. This course earns two GEPs toward Goal 1 Communication and one GEP toward Goal 4 Cultures and Diversity in general education. Prerequisites: ENGLISH 101 and 30 Earned Credits.	LEC	3	3
EDFOUND	311	CLSRM MEAS & ASSESS	Reviews principles of evaluation; grading; representative standardized tests; vocabulary of measurement, test construction and interpretation; informal and formal measurement in the cognitive, affective and psychomotor areas and alternative forms of assessment. Three hours lecture per week. Prerequisite: Junior standing.	LEC	3	3

EDFOUND	323	WEB CONSTR FOR TEACH	This course will introduce students to the design, construction, and maintenance process of web site production for educational settings through the use of HTML and web editors. Students will create web portfolios using their own personal domain name and web sites. Students will learn web site design, navigation, site layout, and how to incorporate text, graphics, sound, and video into web pages. After completing this course, students will be able to construct, maintain and update their own web site for educational purposes. Three hours lecture per week.	LEC	3	3
EDFOUND	325	ED TECH FIELD EXPER	The purpose of this course is to provide students with the opportunity to work with a teacher or technology coordinator in a school district to apply some of the latest educational technology practices directly to the classroom. The format for this course will consist of group meetings on campus, online collaboration with the instructor and class, and field applications. Students will reflect upon and share their experiences with the class at the end of the semester. After completing this course, students will be more aware of the shortcomings and successes of using and applying technology in the schools.	FLD	3	3
EDFOUND	406	MULTICULTURAL EDUC	Studies school situations that reflect the cultural diversity of the nation and the world in their social and school goals and curricular and instructional aims and practices. The course provides strategies for accommodating to the cultural norms, values, attitudes, behavior, language, and learning styles of students and for teaching all students to understand and respect their own and other cultures. This course earns two GEPs toward Goal 4 Cultures and Diversity and one GEP toward Goal 10 Citizenship in general education. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: None.	LEC	3	3
EDFOUND	414	HOME SCHOOL COM RELS	Examines current trends and concerns that characterize the changing American family and draws implications for education. Students will examine family, community, and school structures, patterns, and relationships. They will explore a variety of theories, concepts, principles, and models utilized when implementing effective family, school, and community partnerships. Students will identify and discuss the uses and applications of community and school resources in supporting families and their children. They will learn and simulate techniques for interacting with parents and examine collaboration strategies for interdisciplinary team efforts. This course earns one GEP toward Goal 4 Cultures and Diversity, one GEP toward Goal 6 Social Sciences and one GEP toward Goal 10 Citizenship in general education. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisite: None.	LEC	3	3
EDFOUND	497	TCH ED: FIRST EXPER	The secondary student teaching assignment is determined by the student's area of specialization. Provides opportunities for direct participating experiences. Places students in classrooms with public or private school teachers. The student's major determines their assignment: K-6 - one experience in a primary level and one experience in an intermediate level of a public school; N-K-3 - one experience in a preschool situation and one in a primary level of a public school or two experiences in a primary level of a public school.	FLD	6	6
EDFOUND	498	TCH ED: SECOND EXPER	The secondary student teaching assignment is determined by the student's area of specialization.	FLD	6	6
EDFOUND	506	MULTICULTURAL EDUC		LEC	3	3

EDFOUND	514	HOME SCHOOL COM RELS	Examines current trends and concerns that characterize the changing American family and draws implications for education. Students will examine family, community, and school structures, patterns, and relationships. They will explore a variety of theories, concepts, principles, and models utilized when implementing effective family, school, and community partnerships. Students will identify and discuss the uses and applications of community and school resources in supporting families and their children. They will learn and simulate techniques for interacting with parents and examine collaboration strategies for interdisciplinary team efforts. Prerequisites: None. May be offered in traditional and distance education formats.	LEC	3	3
EDFOUND	522	INTERNET FOR TEACHER	An introductory course for teachers who would like to use the Internet as a resource for the classroom. Covers fundamental concepts of access to and using the World Wide Web, sharing ideas for practical classroom applications, evaluating Internet resources, and downloading and maintaining Internet software. Prerequisite is an introductory computer course at the undergraduate or graduate level. Taught on Macintosh computers and completing online assignments requires personal access to the Internet or ability to use university Macintosh labs outside of normal class hours. May be offered in traditional and distance education formats. Three hours lecture per week.	LEC	3	3
EDFOUND	540	DATA DRIVEN DECISIONS	Focuses on accessing and use appropriate data to inform decision-making at all level of the system. Instruction will address the various data tools available through The Pennsylvania Department of Education (PDE) and other forms of student achievement and staff development data to develop actions plans for enhancing student performance and instructional practice. Students will utilize action research to make informed decision. Instruction includes methods of reporting regulations for student achievement and other data to parents and the public. Prerequisites: EDFOUND.573, EDFOUND.579, EDFOUND.514, EDFOUND.576 or recommendation of program coordinator. May be offered in traditional and distance education formats.	LEC	3	3
EDFOUND	573	INTRO TO EDUC ADMIN	Focuses on examination of the functions and tasks of educational administration. Issues include the evolving school setting; the meaning, development, and work of school administrators; educational systems analysis; school personnel administration; administrative and organizational behavior; and career ladders in educational administration. Three hours lecture per week. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	LEC	3	3
EDFOUND	576	SCHOOL LAW & FINANCE	Considers limitations established by local, state, and federal laws relating to the interactions of school personnel. Special attention to recent changes resulting from judicial decisions. Covers fiscal control of education with emphasis on local budgetary problems. May be offered in traditional and distance education formats. Three hours lecture per week.	LEC	3	3
EDFOUND	584	C&I THR DESIGN DEV	Competency-based course consisting of elements that provide a base in relevant theory associated with the activity of curriculum development. A review, critique, and evaluation of current theoretical positions and design methodology are an integral part of the course. Three hours lecture per week. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	LEC	3	3
EDFOUND	585	CURR & INSTR EVAL	Focuses on the use of current theory and practice for the evaluation of school curriculum and instruction. Reviews, critiques, and applications of current frameworks and practices in curriculum development, professional development, and instructional evaluation are integral components of this course. Three hours lecture per week. This course satisfies PDE guidelines for Inclusive Classrooms and Standards Aligned Systems (SAS). This course may be offered via distance education or in the traditional classroom setting.	LEC	3	3

EGGS	100	INTRO ENVIRO SCIENCE	Provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for mitigating and/or preventing them. This course is appropriate for all students, has no prerequisites, and is required for majors in Environmental, Geographical, and Geological Sciences. The course is comprised of three hours of lecture per week. Out-of-class field trip with a modest fee is required. This course earns three GEPs toward Goal 5 Natural Sciences in general education.	LEC	3	3
EGGS	101	INTRO PHYSICAL GEOG	Investigates the physical processes that create, maintain and modify Earth's physical features, including those that operate in the atmosphere, hydrosphere, lithosphere and biosphere. Emphasis is placed on how people interact with the physical landscape. This course is appropriate for all students and has no prerequisites. The course is comprised of three hours of lecture per week. This course will earn one GEP toward Goal 3 Analytical and Quantitative Skills general education and two GEPs toward Goal 5 Natural Sciences general education.	LEC	3	3
EGGS	102	WORLD CULTURAL GEOG	Investigates the relationships humans, land, culture, and economic activities from a geographic perspective. Demonstrates the tension between two important themes - globalization and cultural diversity - at local, regional, and global scales. This course is appropriate for all students and has no prerequisites. This course is comprised of the hours of lecture and discussion per week. This course will earn two GEPs toward Goal 4 Cultures and Diversity general education goal and one GEP toward Goal 6 Social Sciences general education.	LEC	3	3
EGGS	103	DINOSAURS	Explores the nature of scientific and fundamental concepts in earth history using dinosaurs as the platform. Dinosaurs and their relatives are used to examine: the nature of science; methods employed to determine the geologic age of rocks and fossils; processes of fossilization; the origin and extinction of organisms; how paleontologists find, excavate, reconstruct, and interpret the behavior of extinct organisms; how scientists are able to interpret the environments in which extinct organisms lived; and how dinosaurs are portrayed in past and present media, both scientific and popular. Fieldtrip(s) may be required. This course will earn three GEPs toward Goal 5 Natural Sciences general education.	LEC	3	3
EGGS	104	WORLD REGIONAL GEOG	Investigates the interaction between physical phenomena and human activity, the distribution of economic development, and the uniqueness of each world region. This course is appropriate for all students and has no prerequisites. This course is comprised of three hours of lecture per week. This course will earn two GEPs toward Goal 6 Social Sciences general education and one GEP toward Goal 4 Cultures and Diversity general education.	LEC	3	3
EGGS	105	ENVIR ISS & CHOICES	Examines contemporary environmental resource issues with a values, ethics, and decision-making framework. A selection of issues is examined within a natural sciences and social sciences (geographic) context, with a focus on raising student's awareness of the connections between (a) environmental values and ethics and (b) environmental resource use and management. This course is appropriate for all students and has no prerequisites. This course is comprised of three hours of lecture and discussion per week. This course will earn one GEP toward Goal 2 Information Literacy general education, one GEP toward Goal 5 Natural Sciences general education, and one GEP toward Goal 6 Social Sciences general education.	LEC	3	3

EGGS	106	THE PLANETS	Introduces students to the origin, evolution, and geology of the planetary objects within the solar system, paying particular attention to their physical and dynamical properties, their relationships to each other, and prospects for extraterrestrial life. Emphasis will be placed on the results of recent and current planetary missions. An out-of-class field trip with a modest fee may be required. Prerequisites: None.	LEC	3	3
EGGS	107	NATURAL DISASTERS	Explores principles of Earth's internal and external processes through an examination of their manifestations as naturally-occurring disasters and the resultant impact on human life and property. This course is appropriate for all students and has no prerequisites. This course is comprised of three hours of lecture per week. This course will earn three GEPs toward Goal 5 Natural Sciences general education.	LEC	3	3
EGGS	120	PHYSICAL GEOLOGY	Studies the composition and structure of the Earth and the internal and external processes that shape the surface of our planet. The laboratory introduces fundamental geological techniques including rock and mineral identification and classification, map interpretation and qualitative and quantitative analysis. The course meets for three hours of lecture and two hours of laboratory per week. Field trips are required.	LAB	4	4
EGGS	120	PHYSICAL GEOLOGY	Studies the composition and structure of the Earth and the internal and external processes that shape the surface of our planet. The laboratory introduces fundamental geological techniques including rock and mineral identification and classification, map interpretation and qualitative and quantitative analysis. The course meets for three hours of lecture and two hours of laboratory per week. Field trips are required.	LEC	4	4
EGGS	130	HISTORICAL GEOLOGY	Examines the evolution of earth and life on earth as interpreted from rock and fossil evidence; particular emphasis is placed on the geologic history of North America. The laboratory provides an interpretation of the earth's history through the identification and evolution of the rock and fossil record and through the interpretation of geologic maps. The course meets for three hours of lecture and two hours of laboratory per week. Field trips are required. Prerequisite: EGGS 120 - Physical Geology	LAB	4	4
EGGS	130	HISTORICAL GEOLOGY	Examines the evolution of earth and life on earth as interpreted from rock and fossil evidence; particular emphasis is placed on the geologic history of North America. The laboratory provides an interpretation of the earth's history through the identification and evolution of the rock and fossil record and through the interpretation of geologic maps. The course meets for three hours of lecture and two hours of laboratory per week. Field trips are required. Prerequisite: EGGS 120 - Physical Geology	LEC	4	4
EGGS	150	QUANTITATIVE METHODS	Introduces and applies the quantitative methods commonly used in the geosciences. Students will learn how to measure or estimate the physical properties of the materials that make up the Earth, the forces that operate on the Earth, and the age of the Earth. Emphasis will be placed on activities that demonstrate these methods and exposure to real problems solved by geoscientists. This course is comprised of three hours of lecture per week. This course earns three GEPs toward Goal 3 Analytical and Quantitative Skills general education. Prerequisite: MATH.109 or higher or consent of the instructor.	LEC	3	3
EGGS	242	MAP USE AND ANALYSIS	Uses a variety of published maps for interpreting and interrelating past and present physical and cultural phenomena with a view toward the future. This course has no prerequisites and is comprised of three hours of lecture per week.	LEC	3	3

EGGS	259	OCEANOGRAPHY	Introduces students to the geologic, chemical, physical and biologic aspects of the ocean basins. Emphasis will be on ocean basin structure, topographic features, wave motion, circulation, methods of investigation, and present problems of the marine environment. This course is appropriate for all students and has no prerequisites. This course is comprised of three hours of lecture per week. This course will earn three GEPS toward Goal 5 Natural Sciences general education.	LEC	3	3
EGGS	260	EARTH MATERIALS	Explores the origin, occurrence and identification of the common minerals and of igneous, sedimentary and metamorphic rocks, with emphasis on practical means of recognition. The course meets for three hours of lecture and two hours of laboratory per week. Field trips may be required. Prerequisite: EGGS 120 - Physical Geology and prior or concurrent registration in any Chemistry course.	LAB	4	4
EGGS	260	EARTH MATERIALS	Explores the origin, occurrence and identification of the common minerals and of igneous, sedimentary and metamorphic rocks, with emphasis on practical means of recognition. The course meets for three hours of lecture and two hours of laboratory per week. Field trips may be required. Prerequisite: EGGS 120 - Physical Geology and prior or concurrent registration in any Chemistry course.	LEC	4	4
EGGS	262	PETROLOGY	Presents megascopic and petrographic analysis and identification of rocks with emphasis on field occurrences and associations. This course is comprised of three hours of lecture and two hours of laboratory per week. Field trips may be required. Prerequisite: EGGS 261 - Mineralogy.	LAB	4	4
EGGS	262	PETROLOGY	Presents megascopic and petrographic analysis and identification of rocks with emphasis on field occurrences and associations. This course is comprised of three hours of lecture and two hours of laboratory per week. Field trips may be required. Prerequisite: EGGS 261 - Mineralogy.	LEC	4	4
EGGS	264	APPLIED CARTOGRAPHY	Explores the design and production of maps and other information graphics both from theoretical and applied aspects. Areas of emphasis are data collection, analysis, communication through cartographic design, and the social implications of mapmaking. Students will select appropriate mappable data and use it to design effective maps using professional techniques. This course meets for three hours of lecture per week. Prerequisites: EGGS 360 - Principles of GIS I.	LAB	3	3
EGGS	264	APPLIED CARTOGRAPHY	Explores the design and production of maps and other information graphics both from theoretical and applied aspects. Areas of emphasis are data collection, analysis, communication through cartographic design, and the social implications of mapmaking. Students will select appropriate mappable data and use it to design effective maps using professional techniques. This course meets for three hours of lecture per week. Prerequisites: EGGS 360 - Principles of GIS I.	LEC	3	3
EGGS	265	GEOMORPHOLOGY	Presents the origin of landforms with emphasis on the geologic processes and structures that generate the landforms and applications of landform analysis. This course is comprised of three hours of lecture and two hours of laboratory per week. Prerequisites: EGGS 120 - Physical Geology and EGGS 242 - Map Use and Analysis.	LAB	4	4
EGGS	265	GEOMORPHOLOGY	Presents the origin of landforms with emphasis on the geologic processes and structures that generate the landforms and applications of landform analysis. This course is comprised of three hours of lecture and two hours of laboratory per week. Prerequisites: EGGS 120 - Physical Geology and EGGS 242 - Map Use and Analysis.	LEC	4	4

EGGS	302	LAND RESOURCES MGNT	Examines selected land-related issues and problems with the objective of identifying appropriate management techniques. The course meets for three hours per week. Prerequisite: EGGS 100 - Introduction to Environmental Science or EGGS 105 - Environmental Issues and Choices.	LEC	3	3
EGGS	305	ENV RISK HAZARDS	Explores the human and environmental contributions to the generation and management of risks and hazards originating from extreme natural events and technological failures. Reviews contemporary public policy issues at the local, national and international levels with an emphasis on geographic themes in hazards and emerging management technologies. A field trip may be required. This course is comprised of three hours of lecture per week. Prerequisites: EGGS 101 - Introduction to Physical Geography or EGGS 107 - Natural Disasters.	LEC	3	3
EGGS	315	REC TOURISM SPORT	Explores the array of contemporary issues involving land, leisure and recreational planning and management. This course is comprised of three hours of lecture per week. Prerequisite: None.	LEC	3	3
EGGS	320	REMOTE SENSING EARTH	Studies the principles and practices of remote sensing technology involving use of air- or spacecraft-borne electromagnetic radiation sensors, as directed towards problems and applications in a variety of scientific and land management fields. This course is comprised of two hours of lecture and two hours of laboratory per week. Prerequisite: EGGS 242 - Map Use and Analysis.	LAB	3	3
EGGS	320	REMOTE SENSING EARTH	Studies the principles and practices of remote sensing technology involving use of air- or spacecraft-borne electromagnetic radiation sensors, as directed towards problems and applications in a variety of scientific and land management fields. This course is comprised of two hours of lecture and two hours of laboratory per week. Prerequisite: EGGS 242 - Map Use and Analysis.	LEC	3	3
EGGS	350	ADVANCE PLANNING	Presents the development of skills and techniques used in analysis, plan preparation, goal setting and implementation of urban and regional planning processes and activities. This course is comprised of three hours of lecture per week. Prerequisites: EGGS 250.	LEC	3	3
EGGS	360	PRINCIPLES OF GIS I	Introduces computer assisted analysis geographic data. Emphasizes spatial data structures, geographic data files, database management, spatial analysis and cartographic design are emphasized. Provides practical experience in GIS through exercises and class activities. The course meets for three hours per week. Prerequisites: EGGS 242 - Map Use and Analysis.	LEC	3	3
EGGS	370	SURFACE HYDROLOGY	Study of water movement upon and within the Earth with emphasis on calculations used in flood forecasting, surface water supply and groundwater supply. This course is comprised of two hours of lecture and two hours of laboratory per week. Prerequisite: GEOSCI 100 or EGGS 100 or GEOSCI 120 or EGGS 120 or GEOG 101 or EGGS 101 or consent of the instructor.	LAB	3	3
EGGS	370	SURFACE HYDROLOGY	Study of water movement upon and within the Earth with emphasis on calculations used in flood forecasting, surface water supply and groundwater supply. This course is comprised of two hours of lecture and two hours of laboratory per week. Prerequisite: GEOSCI 100 or EGGS 100 or GEOSCI 120 or EGGS 120 or GEOG 101 or EGGS 101 or consent of the instructor.	LEC	3	3
EGGS	463	FUND PETROLEUM GEOL	Discusses the geological aspects of petroleum, including its properties, origin, migration and accumulation in subsurface reservoirs. In addition, the course also emphasizes the geological and geophysical techniques of petroleum exploration and production. Field trips may be required: Prerequisites: EGGS 368 - Stratigraphy and Sedimentation.	LEC	3	3

EGGS	470	GRNDWATER HYDROLOGY	Focus on groundwater flow theory, well hydraulics, exploration techniques, development of groundwater supplies, and prevention or correction of ground-water pollution. A one or two day field trip may be required. Three hours of lecture and two hours of laboratory per week. Prerequisites: EGGS.265.	LAB	4	4
EGGS	470	GRNDWATER HYDROLOGY	Focus on groundwater flow theory, well hydraulics, exploration techniques, development of groundwater supplies, and prevention or correction of ground-water pollution. A one or two day field trip may be required. Three hours of lecture and two hours of laboratory per week. Prerequisites: EGGS.265.	LEC	4	4
EGGS	475	INDEPENDENT STUDY	Provides an opportunity for student research in various areas of Environmental, Geographical, and Geological Sciences. Research is conducted under the supervision of a faculty member. This course is offered as needed. Prerequisites: 21 semester hours in Environmental, Geographical and Geological Sciences.	IND	1	3
EGGS	493	RESEARCH	Makes use of the skills and knowledge students have acquired in their required coursework to complete and independent research project with the guidance of a faculty advisor. This course is available every semester. Prerequisites: Professional Geology Track: EGGS 261 - Mineralogy, EGGS 262 - Petrology, and EGGS 368 - Stratigraphy and Sedimentology or Environmental Geoscience Track: EGGS 265 - Geomorphology, EGGS 213 - Fundamentals of Soil Science, and EGGS 271 - Fundamentals of Hydrology.	SUP	3	3
ELEMED	120	INTRO TO EDUCATION	The purpose of this course is to facilitate a successful transition to the Early Childhood and Elementary Education Department at Bloomsburg University. Students will complete 40 hours of field experience and learn about the other requirements for admission to the department. The INTASC standards, Bloom's taxonomy, and conceptual framework will also be addressed. Prerequisites: None.	LEC	1	1
ELEMED	121	INTRO EARLY CHILD ED	This course examines the historical and philosophical foundations of Early Childhood Education. It analyzes current issues, programs and practices relating to children from birth to grade four. Three hours lecture per week.	LEC	3	3
ELEMED	150	INTRO MID LEVEL ED	The purpose of this course is to facilitate a successful transition to the Middle Level Program of Study. Students will complete 40 hours of field experience in a middle level environment, explore the philosophical and historical underpinnings of middle level education, and learn about the other requirements for admission to the department. The Interstate New Teachers Assessment and Support Consortium (INTASC) standards, Blooms taxonomy of three domains, College of Education conceptual framework, ethics and legal responsibilities, and National Middle School Association methodologies will also be addressed. Prerequisites: None.	LEC	1	1
ELEMED	214	TCH RDG EC: BIRTH-K	Examines reading development from birth through emergent literacy. Pre-service teachers will learn about infant, toddler, preschooler, and early childhood development as it directly relates to emergent literacy. These pre-service teachers will also learn instructional techniques to facilitate literacy learning that incorporates a variety of research-based approaches, methodologies, instructional materials, and technologies that will assist early childhood learners literacy development. Three hours lecture per week. Prerequisites: 45 Semester hours.	LEC	3	3
ELEMED	218	TCH MATH EC BIRTH-K	This course develops mathematical methods, materials, understandings and attitudes essential in the teaching of contemporary programs in the early childhood learners from birth through kindergarten. Three hours lecture per week. Prerequisites: 45 Semester hours.	LEC	3	3

ELEMED	324	LA & LIT DIVERSE EC	This course will focus on the language and literacy development of young children, birth through fourth grade. Strategies for planning, teaching, and assessing a high-quality early childhood language arts programs will be emphasized. Emphasis will be placed on listening, speaking, and writing skills for the purpose of developing literacy rich curricula and environments that support and advocate diversity. Three hours lecture per week. Prerequisite: Approved as BSED Major.	LEC	3	3
ELEMED	329	YCP AS EDU PROCESS	This introductory course examines the significance of young children's play in development, curriculum, and assessment. Additionally, this class will investigate methods of play components appropriate for the educational setting. Developmentally appropriate activities will be emphasized. Three hours lecture per week. Prerequisites: 45 Semester hours.	LEC	3	3
ELEMED	331	TCH SCI & EE PK - 4	The purpose of this course will be to demonstrate and critically discuss methods of teaching science in grades PK-4, to provide science and environmental education knowledge, skills, techniques, and practical teaching experience, and to encourage positive attitudes, self confidence, and motivation to promote science and environmental education in the school and community. Appropriate teaching strategies, materials, and relevant science content will be the focus of discussions and activities. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisite: Approved as BSED Major.	LEC	3	3
ELEMED	334	TCH READ IN EC 1-4	Examines reading development from first grade through fourth grade. Pre-service teachers will learn about elementary school childhood development as it directly relates to literacy skills of phonemic awareness, phonics, fluency, vocabulary, and comprehension. These pre-service teachers will also learn instructional techniques to facilitate literacy learning that incorporates a variety of research-based approaches, methodologies, instructional materials, and technologies that will assist early elementary school learners literacy development. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisite: Approved as BSED Major.	LEC	3	3
ELEMED	336	TCH SOC STUD PK - 4	The course emphasizes methods and materials appropriate for teaching pre-school through grade 4 social studies education in contemporary society. Students will explore planning, assessment, teaching strategies, social sciences, citizenship, and global education. Students will look at social studies in the context of integrated instruction. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: Approved BSED Major.	LEC	3	3
ELEMED	338	DIAG RDG PRE K-4	This course examines the diagnostic practices utilized in grades PK-4. Pre-service teachers will learn and apply current research based diagnostic methodology. Application of methods to diagnose strengths/needs in literacy to inform instruction and plan appropriate curriculum will be emphasized. Interventions based on individual children's needs will be defined to support the diagnosis. Three hours lecture per week. Prerequisites: Approved BSED Major.	LEC	3	3
ELEMED	340	TCH MATH ECE	Develops mathematical methods, materials, understandings and attitudes essential in the teaching of contemporary programs in the early childhood grades 1-4. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisite: Accepted in BSED Major.	LEC	3	3
ELEMED	343	ASSESS IN ECE	A study of how teaching, learning and assessment are used collectively in grades PK-4. The emphasis is on how teachers can use assessment instruments and data to guide professional practice. Three hours lecture per week. Prerequisites: 45 Semester hours.	LEC	3	3

ELEMED	347	ARTS/PLAY DEV CHILD	Familiarize students with current theories and pedagogical approaches for nurturing and promoting creative expression, including play, in young children, birth through grade four. Students will learn about the relationship between the arts and learning with particular emphasis on the visual and performing arts such as drawing, music, movement, and drama in the early childhood setting. Attention will be placed on the role of the early childhood educator in planning a creative learning environment that supports a developmentally appropriate and inclusive arts-based curriculum. This course may be offered distance education or in the traditional classroom setting. Three hours lecture per week. Prerequisites: 45 Semester hours.	LEC	3	3
ELEMED	366	READING CNT AREA 4-8	Examines best practices in teaching literacy strategies for content area curriculum in upper elementary through middle school grades. Pre-service teachers shall learn how to integrate reading skills into content-specific courses, i.e., social studies, science, mathematics for students in grades 4-8. New literacies and technologies shall be explored and utilized to support the instructional pedagogy that matches the needs of these children/pre-adolescents/adolescents. Three hours lecture per week. Prerequisite: Approved as BSED Major.	LEC	3	3
ELEMED	494	TCH ED: FIRST EXPER	The student teaching assignment is determined by the student's area of specialization. Provides opportunities for direct participating experiences. Places students in classrooms with public or private school teachers. The student's major determines their assignment: K-6 - one experience in a primary level and one experience in an intermediate level of a public school; N-K-3 - one experience in a preschool situation and one in a primary level of a public school, or two experiences in a primary level of a public school.	FLD	6	6
ELEMED	495	TCH ED: SECOND EXPER	see ELEMED.494	FLD	6	6
ELEMED	537	M&M LANG ARTS SOC ST	Offers an approach in curriculum in which social studies and language arts content, skills and methods of instruction are integrated. Particular attention given to creative, integrated activities and learning situations that range from individual inquiry to group interactions. Three hours lecture per week.	LEC	3	3
ELEMED	581	IND STUDY ELEM ED	Comparable to EDFOUND.583.	IND	1	6
ELEMED	594	PRACT EARLY CHILD ED	Individually prescribed course of study and activity-based learning and practice teaching. Previous experience and academic achievement reviewed. Practicum proposal required, and consent of program coordinator and department chairperson required.	FLD	6	6
ENGLISH	101	FOUND OF WRITING	Provides foundational writing experience and instruction to facilitate first-year students' transition to writing at the postsecondary level by exploring the implications of writers' rhetorical situations (audience, purpose, and media) and of individual and social writing processes (drafting, peer review, and reflection) on the texts they generate. Engages students in critical reading and use of source materials. All students will compile and submit an ePortfolio to the English department. Satisfies the General Education requirement of a foundational course in English Composition that students are expected to fulfill in their first year of enrollment. This course earns three GEPs towards Goal 1 - Communication. Prerequisites: None.	LEC	3	3

ENGLISH	151	INTRO TO LITERATURE	Defines and analyzes the four genres of creative literature-poetry, drama, novel, and short story in order to instill an understanding and appreciation of literature. Special attention is given to the techniques through which literature captures and comments on human experience. The course is designed for students seeking General Education Points in Arts and Humanities and Communication and is conducted in a combination of lecture and discussion, and formal and informal writing assignments. Not applicable toward a major in English. Three hours lecture per week. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
ENGLISH	152	LITERATURE & SOCIETY	Focuses on a particular theme, social issue, ethical dilemma, or area of study or work through readings (and/or screenings) of a range of texts. Provides a literary lens through which to explore the chosen topic. Course focus varies with instructor. The course is designed for students seeking General Education Points in Arts and Humanities and Communication and is conducted in a combination of lecture and discussion, and formal and informal writing assignments. Not applicable toward a major in English. Three hours lecture per week. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
ENGLISH	156	POPULAR LITERATURE	Examines literature designed for popular audiences, with emphasis on major themes and forms presented in popular literature. Students will learn to approach this literature analytically and critically and to consider its connection to other literatures and to the culture within which it has developed. Content will be chosen by the instructor and will vary with each offering of the course. The course is designed for students seeking General Education Points in Arts and Humanities and Communication and is conducted in a combination of lecture and discussion, and formal and informal writing assignments. Not applicable toward a major in English. Three hours lecture per week. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
ENGLISH	201	COMPOSITION 2	Intermediate-level study and practice in composition, reinforcing and expanding basic writing skills. Instruction in short and long essays and in research-supported writing. This course satisfies 3 credits in communication: the second level writing or writing intensive literature courses for general education/ This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: ENGLISH.101 or consent of department chairperson.	LEC	3	3
ENGLISH	203	APPR TO LIT STUDY	Examines the fundamental elements of literary history, critical and analytical strategies, terminology, research, and writing. Prepares students for advanced techniques of textual analysis, literary research, and the writing of interpretive and research essays. Format is lecture-discussion. Enrollment is restricted to English majors and minors except with permission of the English Department Chair. Typically offered in spring and fall semesters. Prerequisites: ENGLISH 101.	LEC	3	3
ENGLISH	204	INTRO CREATIVE WRIT	Introduces methods and craft of creative writing in prose and poetry forms. Students create and revise their own imaginative works using models by established writers. The course is conducted in a combination of lecture, peer workshop, and discussion. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisite: ENGLISH.101 or permission of instructor. Course offered face-to-face or distance ed.	LEC	3	3

ENGLISH	212	ENGLISH GRAMMAR	Familiarizes students with both traditional and modern grammatical terminology, offers a descriptive overview of American English grammars and syntax, and provides a structural framework for analyzing written English. Course study is designed (i) to enable students to gain an explicit (conscious) knowledge of English grammar and syntax, (ii) to provide students with the tools necessary for analyzing and understanding English syntactic structures in standard and non-standard varieties of American English, and (iii) to understand the value of judgments placed on grammar (particularly on non-standard dialects) in education and in American society. Prerequisite: ENGLISH 101. Open to all majors. Typically offered in fall and springs semesters. GEPs toward Goal 1 Communication and Goal 4 Cultures and Diversity. Prerequisite: ENGLISH 101. Open to all majors.	LEC	3	3
ENGLISH	226	EUROPEAN LIT 1	Examines important literary works of the Western tradition from texts of the Ancient Mediterranean and Classical Greece through Renaissance Europe. Lecture/ discussion. Students will study major authors and literary genres of the period and will write analytically about assigned texts. Required for the English major; open to students of all majors. Typically offered in the fall and spring semesters. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Three hours lecture per week. Prerequisite: ENGLISH.101.	LEC	3	3
ENGLISH	236	AMERICAN LIT 1	Examines American literature and its cultural contexts from its colonial beginnings to the Civil War. Lecture/discussion. Students will study major authors and literary genres of the period and will write analytically about assigned texts. Required for the English major; open to students of all majors. Typically offered in the fall and spring semesters. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: ENGLISH.101.	LEC	3	3
ENGLISH	237	AMERICAN LIT 2	Examines American literature and its cultural contexts from the Civil War through the modern era. Lecture/discussion. Students will study major authors and literary genres of the period and will write analytically about assigned texts. Required for the English major; open to students of all majors. Typically offered in the fall and spring semesters. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: ENGLISH.101.	LEC	3	3
ENGLISH	246	BRITISH LIT 1	Examines literature in English and in translation, written by authors from the Middle Ages through the 18th century, within the social, political, and cultural contexts of their respective periods. Lecture/discussion. Students will study major authors and literary genres of the period and will write analytically about assigned texts. Required for the English major; open to Students of all majors. Typically offered in the fall and spring semesters. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: ENGLISH.101.	LEC	3	3
ENGLISH	247	BRITISH LIT 2	Examines major British authors from 1800 to the mid-20th century, with selected later 20th century literary developments, within the social, political, and cultural contexts of their respective periods. Lecture/discussion. Students will study major authors and literary genres of the period and will write analytically about assigned texts. Required for the English major; open to students of all majors. Typically offered in the fall and spring semesters. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: ENGLISH.101.	LEC	3	3

ENGLISH	256	NON-WESTERN LIT 1	Examines the forms, themes and social context of Non-Western Literature from the Middle East and Asia. Major themes include the interaction between literature and the modern world, cultural displacement, identity and cultural politics, globalization, modernization, urbanization, nationalism, colonialism, religious belief, tradition, life in the city, life in the country, and family life. Lecture/discussion. Students will study major authors and literary genres and will write analytically about assigned texts. Open to all students. English majors must take either Non-Western Literature I or Non-Western Literature II and may take both. This course earns one GEP toward Goal 1 Communication, one GEP toward Goal 4 Cultures and Diversity and one GEP toward Goal 7 Arts and Humanities in general education. Three hours lecture per week. Prerequisite: ENGLISH.101.	LEC	3	3
ENGLISH	280	POETRY	Examines the genre of poetry with attention to form, technique, interpretation, and historical evolution. Lecture/discussion. Students will analyze individual poems using established terminology and appropriate interpretive approaches. A few poets will be singled out for extended consideration. Note: this is not a class in the writing of poetry. Open to students in all majors. Prerequisite: ENGLISH.101. Offered at least once a year. Three hours lecture per week. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Offered face-to-face and distance ed.	LEC	3	3
ENGLISH	287	BLACK WOMEN WRITERS	Examines significant fiction, drama, poetry and autobiographies written by women of African descent during the 20th and 21st centuries. Open to all majors. This course earns one GEP toward Goal 1 Communication, one GEP toward Goal 4 Cultures and Diversity and one GEP toward Goal 7 Arts and Humanities in general education. Typically offered every two years. Three hours lecture per week. Prerequisite: ENGLISH.101.	LEC	3	3
ENGLISH	297	Wrtg Consultant Trng	Introduces students interested in working as writing consultants in the Bloomsburg University Writing Center (BUWC) to writing center theory and practice, writing across the curriculum, basic writing, issues of language diversity, and other topics related to effectively helping a diverse population of student writers from multiple disciplines. Prerequisites: 15 credits including English 101, 201 or writing intensive course.	SUP	1	1
ENGLISH	302	CREAT WRIT: NON-FICT	Introduces methods and craft of non-fiction writing. Students create and revise their own imaginative works using models by established writers. Open only to English majors and minors and is an elective for Creative Writing Majors supporting Objective Three (write original inventive and creative works). Three hours lecture per week. Prerequisites are ENGLISH 204 and ENGLISH 260, or permission of the instructor. Taught at least every other year.	LEC	3	3
ENGLISH	306	THEORY PRACT WRITING	Introduction to new theories of writing and the teaching of writing including both study of and practice in the methods the theories require. Recommended for secondary education students in English, but open to all students interested in advanced work in writing. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: 45 credits and either ENGLISH.201 or ENGLISH.203 or permission of the instructor. Offered in fall semester only.	LEC	3	3
ENGLISH	311	STRUCTURE OF ENGLISH	Introduces students to linguistic science. Focuses on the sound patterns, morphology, word formation processes, semantics, and syntax of modern English. This course is open to all English majors and minors and is an elective in the English Department's Literature Concentration supporting Program Goal 2 ("Develop a Range of Literacies"). This is a required course for English/Secondary Education Concentration students. Typically offered once a year. Prerequisites: ENGLISH.101 and 45 credits or permission of department chair. Three hours lecture per week.	LEC	3	3

ENGLISH	312	HIST OF ENG LANGUAGE	Explores the history of the English language from its Indo-European origins to the present. This course is open to all English majors and minors and is an elective in the English Department's Literature Concentration and Secondary Education Concentration supporting Program Goal 2 ("Develop a Range of Literacies"). Typically offered once a year. Prerequisites: ENGLISH.101 and 45 credits, or permission of the department chair. Three hours lecture per week.	LEC	3	3
ENGLISH	342	RENAISSANCE	The poetry and non-dramatic prose of the 16th and 17th centuries (to 1660), excluding the works of Milton. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: 45 credits and either ENGLISH.201 or ENGLISH.203 and ENGLISH.246 or permission of the instructor. Not offered every semester.	LEC	3	3
ENGLISH	347	STUDIES IN BRIT LIT	Major writers or themes instrumental in shaping and interpreting the British experience. Writers vary with each presentation of the course. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: 45 credits and either ENGLISH.201 or ENGLISH.203 or permission of the instructor. Not offered every semester.	LEC	3	3
ENGLISH	363	SHAKESPEARE	Study of Shakespeare's works, with emphasis on Shakespeare as poet and playwright and attention to conditions of the Elizabethan theater and history of the Shakespearean text. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: 45 credits and either ENGLISH.201 or ENGLISH.203 and ENGLISH.246 or permission of the instructor.	LEC	3	3
ENGLISH	384	LIT FOR CHILDREN	Explore teaching with a focus on children's literature. Students will learn how to select and teach quality children's literature for their classrooms using hands-on creative and reflective approaches. Prerequisites: Students must have declared a major in the College of Education and completed any 15 credits before registering.	LEC	3	3
ENGLISH	385	LIT FOR YOUNG ADULT	Investigates the teaching of Young Adult (YA) literature, based on broad definition of literacy consistent with national standards in English/Language Arts. The course addresses the modes, audiences, and genres which constitute YA literature, proposing criteria that can be used for choosing texts for the secondary English Language Arts classroom. It provides a theoretical justification for YA literature, as well as pedagogical strategies for approaching such texts with students. This course may offer a field experience; students who take advantage of this opportunity will need to obtain the appropriate clearances. Prerequisites: 45 credits, including English 101 and English 203, or permission of department chair. Typically offered once a year.	LEC	3	3
ENGLISH	397	WRTG CTR CONSULTING	Assists students working as a writing consultants in the Bloomsburg University Writing Center (BUWC) in continuing their professional development by exploring specific topics such as technology in the writing center, writing across the curriculum, issues of language diversity, service-learning, basic writing, and other issues related to effectively helping a diverse population of student writers from multiple disciplines. Course may be repeated up to six times. Prerequisites: 15 credits including ENGLISH.221, ENGLISH.101 or ENGLISH.201 or a writing-intensive course, and/or permission of University Writing Center director	SUP	1	1

ENGLISH	402	WRIT MULTIPLE MEDIA	Examining the intersection of writing and multiple media, this course is open to all majors and designed for any student with appropriate prerequisites, but developed for professional writers in positions that use multimodal writing. The course will work well for a variety of majors, particularly if the student or professional is enrolled in the PWDR minor or certificate. The class focuses on understanding digital rhetorical strategies as well as how technology and social networking have had significant consequences on the writing process. As many entry level writing positions are requiring familiarity with social media, particular attention will be given to this genre and style. Becoming more adept at managing the intersection of digital, visual, and audio genres are also explored. Because this is an experiential learning course, it is often the case that students will work in professional writing situations. The course is offered on a 4-course and is offered on a 2-year rotation. It is an evening course offered once a week.	LEC	3	3
ENGLISH	404	CREATIVE WRITING SEM	An advanced course in creative writing. Through revision and editing, students have the opportunity to create a publishable body of work in a genre of their choosing, and create a portfolio suitable for job/graduate school interviewing. This course will enable students to develop a significant creative writing project while in a workshop setting and under the guidance of an instructor. Exercises to hone craft and essays to articulate theory are also included. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: 90 credit hours plus ENGLISH.204 and two 300-level creative writing genre courses. Not offered every semester.	SEM	3	3
ENGLISH	433	AMERICAN MODERNISM	Consideration of significant fiction, drama and poetry written between 1914 and 1945, with emphasis on writers and texts reflecting the social, political, intellectual and artistic diversity of the period. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: 45 credits and either ENGLISH.201 or ENGLISH.203 and ENGLISH.237 or permission of the instructor. Not offered every semester.	LEC	3	3
ENGLISH	491	TOPICS IN CRITICISM	Examines a selected topic in literary-critical practice in the light of contemporary theoretical debate. Content will vary with the instructor and with the semester the course is offered. This course is open to all English majors and minors and is an elective in the English Department's Literature Concentration and Secondary Education Concentration supporting Program Goal 3. Prerequisites: ENGLISH.101, ENGLISH.203, and completion of four additional courses in English, or permission of department chair. Typically offered once a year. Three hours lecture per week.	LEC	3	3
ENGLISH	495	ENGLISH PRACTICUM	Enables a student to work with a faculty member on research, publication, or other professional project, expanding previously gained knowledge to a specific professional application. One academic credit for each 40 hours of work. Requires 60 credit hours.	LEC	1	3
ENGLISH	497	ENGLISH INTERNSHIP	A work-study program. Open to English majors; others by departmental consent. Prerequisite: 45 credits and either ENGLISH.201 or ENGLISH.203 or permission of the instructor.	SUP	1	12
ENGTECH	101	INTRO TO ENG TECH	Provides an overview of opportunities and challenges of an engineering technology career. Topics include academic success strategies, various engineering disciplines, product development process, communication skills, and design and implementation of an engineering design project. Prerequisites: None. Three hours lecture/lab per week.	LEC	3	3

ENGTECH	180	CAD ENGRG GRAPHICS	Provides hands-on introduction to computer-aided design with an emphasis on basic engineering graphics. Orthographic, sectional, auxiliary, isometric, and perspective views. Solid modeling, dimensions, and tolerances. This course does not count as a Group C, Natural Sciences & Math General Education Requirements.	LEC	3	3
ENGTECH	231	ELECT MACH & POW SYS	Explores fundamentals of electrical machines, transformers and power systems. Main topics include three-phase circuits, single-phase and three-phase transformers, synchronous generators and motors, three-phase induction motors, single-phase motors, DC generators and motors, stepper motors, electronic control of motors, and electric utility power generation, transmission, and distribution. Three hours lecture and one three-hour laboratory per week. Prerequisites: ENGTECH 141 - Circuit Analysis and PHYSICS 212 - General Physics 2	LAB	4	4
ENGTECH	231	ELECT MACH & POW SYS	Explores fundamentals of electrical machines, transformers and power systems. Main topics include three-phase circuits, single-phase and three-phase transformers, synchronous generators and motors, three-phase induction motors, single-phase motors, DC generators and motors, stepper motors, electronic control of motors, and electric utility power generation, transmission, and distribution. Three hours lecture and one three-hour laboratory per week. Prerequisites: ENGTECH 141 - Circuit Analysis and PHYSICS 212 - General Physics 2	LEC	4	4
ENGTECH	321	MANUF PROCESSES	Studies the various types of manufacturing processes and the design of parts and assemblies to insure their manufacturability. Includes PCB artwork and fabrication, process design and evaluation using SPC techniques, quality control, reliability and visits to area manufacturing facilities. Two hours lecture and three hours lab per week. Prerequisites: ENGTECH.241.	LAB	3	3
ENGTECH	321	MANUF PROCESSES	Studies the various types of manufacturing processes and the design of parts and assemblies to insure their manufacturability. Includes PCB artwork and fabrication, process design and evaluation using SPC techniques, quality control, reliability and visits to area manufacturing facilities. Two hours lecture and three hours lab per week. Prerequisites: ENGTECH.241.	LEC	3	3
ENGTECH	331	LINEAR SIGNALS & SYS	This course provides a mathematical basis for analyzing and designing electrical systems. Topics include Laplace transform, transfer functions, frequency response, Fourier analysis, Z-transform, and stability considerations for continuous-time and discrete-time systems. Prerequisites: ENGTECH.141 and MATH.322 (completed or concurrent). Three hours lecture per week.	LEC	3	3
ENGTECH	380	COOP IN INDUSTRY 1	Provides full-time work experience and training in an industrial setting to enhance engineering skills in electrical and electronics engineering technology. This is the first of a two course coop education sequence. A cooperative Education Application form must be completed and approved. Course offered under Pass/Fail only basis.	SUP	0	0
ENGTECH	381	ENGR APPL IN IND 1	Presents case studies of engineering problems and their solutions in various industrial settings. The role of organizational structure and project management in engineering design and manufacturing is discussed. This is the first of a two-part engineering applications in industry sequence. Three hours of lecture per week. Prerequisite: ENGTECH.380.	LEC	3	3

ENGTECH	431	IND. PROCESS CONTROL	Addresses fundamental and practical issues related to industrial process control system design, implementation and operation. The various types of automatic controllers including on/off, PID and digital PID, and their implementation using discrete electronics, personal computers, and programmable logic controllers are discussed. Prerequisites: ENGTECH.241 and ENGTECH.331 or consent of the instructor. Two hone hour lectures and one three-hour laboratory per week.	LAB	3	3
ENGTECH	431	IND. PROCESS CONTROL	Addresses fundamental and practical issues related to industrial process control system design, implementation and operation. The various types of automatic controllers including on/off, PID and digital PID, and their implementation using discrete electronics, personal computers, and programmable logic controllers are discussed. Prerequisites: ENGTECH.241 and ENGTECH.331 or consent of the instructor. Two hone hour lectures and one three-hour laboratory per week.	LEC	3	3
ENGTECH	441	COMM. SYSTEMS	Presents the theory and application of modern communications systems, including types of modulation, noise, multiplexing, multiple access and digital signaling. Use of modern software package for communication systems design and analysis. Three hours lecture and two hours lab per week. Prerequisites: PHYSICS.212 and ENGTECH.331	LAB	4	4
ENGTECH	441	COMM. SYSTEMS	Presents the theory and application of modern communications systems, including types of modulation, noise, multiplexing, multiple access and digital signaling. Use of modern software package for communication systems design and analysis. Three hours lecture and two hours lab per week. Prerequisites: PHYSICS.212 and ENGTECH.331	LEC	4	4
EXERSCI	112	VARSITY ATHLETICS 1	Open to any student who is a member in good standing of a Bloomsburg University athletic team. Course is graded pass/fail. This course will apply 1 credit toward satisfying the Fitness and Recreational Skills requirement.	ACT	1	1
EXERSCI	113	VARSITY ATHLETICS 2	Open to any student who is a member in good standing of a Bloomsburg University athletic team. Course is graded pass/fail. This course will apply 1 credit toward satisfying the Fitness and Recreational Skills requirement.	ACT	1	1
EXERSCI	114	TEAM SPORTS	Provides activity and instruction in the development of individual offensive and defensive fundamentals and their incorporation into a team concept. Students are required to participate in various team sports to facilitate the development of healthy behaviors over their lifetimes. This course earns two GEPs toward Goal 9 Healthy Living in general education. Prerequisites: None.	ACT	2	2
EXERSCI	117	BEG/JAZZ/BALLET	Welcomes new movers to explore the fundamentals of jazz and ballet dance from an artistic, physically active and historical approach. Students will gain an appreciation for the historical figures, movement techniques, and terminology associated with each style, while actively experiencing the broad range of physical attributes while performing each unique form. Students will gain creative tools transferable to all career paths, in addition to developing life-long practices for healthy living. Open to students in all majors. This course earns two GEPs toward Goal 9 Healthy Living in general education. Prerequisites: None.	ACT	2	2

EXERSCI	150	AQUATICS	Provides an opportunity to develop personal health and fitness using a variety of training techniques in the aquatic medium. This course is designed to develop the knowledge and skills necessary for developing stroke technique, increase aerobic endurance, and gain an understanding of acute and chronic responses to aquatic exercises. This course earns two GEPs toward Goal 9 Healthy Living in general education. Prerequisites: The student should have the ability to perform basic skills such as floating, treading, and swimming one length of the pool. A basic skills test may be administered to ensure each student has these basic skills.	ACT	2	2
EXERSCI	150	AQUATICS	Provides an opportunity to develop personal health and fitness using a variety of training techniques in the aquatic medium. This course is designed to develop the knowledge and skills necessary for developing stroke technique, increase aerobic endurance, and gain an understanding of acute and chronic responses to aquatic exercises. This course earns two GEPs toward Goal 9 Healthy Living in general education. Prerequisites: The student should have the ability to perform basic skills such as floating, treading, and swimming one length of the pool. A basic skills test may be administered to ensure each student has these basic skills.	ACT	2	2
EXERSCI	161	INTRO EXERCISE SCI	Provides a basic overview of the sub-disciplines and potential careers, including their professional duties, within the broader field of Exercise Science. This course will introduce students to the variety of scientific, popularized, and professional information available to Exercise Science professionals and the public. Students will be required to find, analyze, and use information from a variety of sources to investigate areas of interest within the field of Exercise Science. Prerequisites: None.	LEC	3	3
EXERSCI	226	JOGGING/WALKING	Explores the relationship of jogging and walking to one of the components of wellness for a healthy lifestyle. Students will measure their cardiorespiratory endurance as they engage in jogging and walking activities. This course earns two GEP's towards Goal 9 Healthy Living in general education. Prerequisites: None.	ACT	2	2
EXERSCI	226	JOGGING/WALKING	Explores the relationship of jogging and walking to one of the components of wellness for a healthy lifestyle. Students will measure their cardiorespiratory endurance as they engage in jogging and walking activities. This course earns two GEP's towards Goal 9 Healthy Living in general education. Prerequisites: None.	ACT	2	2
EXERSCI	230	WT TRNG & FITNESS	Develops knowledge, skill and appreciation of weight training and conditioning programs. Active participation is required to facilitate the development of the health and skill related components of weight training and fitness. This course earns two GEP's towards Goal 9 Healthy Living in general education. Prerequisite: None.	ACT	2	2
EXERSCI	230	WT TRNG & FITNESS	Develops knowledge, skill and appreciation of weight training and conditioning programs. Active participation is required to facilitate the development of the health and skill related components of weight training and fitness. This course earns two GEP's towards Goal 9 Healthy Living in general education. Prerequisite: None.	ACT	2	2
EXERSCI	230	WT TRNG & FITNESS	Develops knowledge, skill and appreciation of weight training and conditioning programs. Active participation is required to facilitate the development of the health and skill related components of weight training and fitness. This course earns two GEP's towards Goal 9 Healthy Living in general education. Prerequisite: None.	ACT	2	2
EXERSCI	241	JUDO/SELF-DEFENSE	Provides the student with an understanding of the sport and a competency in the fundamental skills of Judo and Self-defense. Active participation is required to facilitate the development of the health and skill related components of physical fitness. This course earns two GEPs toward Goal 9 Healthy Living in general education. Prerequisite: None.	ACT	2	2

EXERSCI	250	LIFEGUARDING	Provides an opportunity to attain an American Red Cross Lifeguarding Certificate. CPR, AED, and First Aid are taught as part of this course. Students must be able to pass the standard Red Cross swimming tests to be eligible for certification. This course earns two GEP towards Goal 9 Healthy Living and one GEP toward Goal 10 Citizenship in general education.	ACT	3	3
EXERSCI	270	EXERCISE & YOU	Studies and measures the health-related components of physical fitness including cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition and how they relate to making lifelong, healthy decisions. Anatomical structures, physiological functions, nutrition, and stress reduction are addressed through programmed exercise and practical applications. Use of emergent technology will be used to track monitor, and assess physical fitness. This course earns two GEPs toward Goal 9 Healthy Living and one GEP towards Goal 2 Information Literacy, in general education. Prerequisites: NONE.	ACT	3	3
EXERSCI	280	CURR ISS HLTH PROMOT	Assesses major problems which concern communities today: drugs, sexually transmitted diseases, pollution, alcohol and suicide.	LEC	3	3
EXERSCI	282	CARE & PREVENTION	This course serves as an introductory course in the care and prevention of common musculoskeletal injuries. Prevention, recognition and the care of trauma to the musculoskeletal systems will be discussed in detail. Prerequisite: BIOLOGY.173.	LEC	3	3
EXERSCI	283	GROUP FITNESS INSTRUCTOR	The purpose of this course is to introduce exercise science majors to the teaching principles and current techniques involved in aerobic-dance and step training. Several methods of designing physical and motivational programs will be incorporated to properly teach aerobic-dance/step classes to those in corporate or similar fitness areas.	LEC	3	3
EXERSCI	286	DECISIONS FOR HEALTH BEH	Focuses on personal health issues, the consequences of decisions made about health choices and the societal implications, locally and globally of those decisions. Course topics include: human sexuality, mental health, fitness and wellness, nutrition, cancer, and death and dying. This course earns one GEP toward Goal 2 Information Literacy and one GEP toward Goal 10 Citizenship in general education. Prerequisite: None.	LEC	3	3
EXERSCI	287	INTRO TO COACHING	Provides prospective coaches with tools to develop a foundation for the coaching profession. An overview of basic theories and coaching applications in sport philosophy, sport psychology, sport physiology, sport management and sport pedagogy are discussed. This course earns one GEP toward Goal 1 Communication, one GEP toward Goal 4 Cultures and Diversity and one GEP toward Goal 10 Citizenship in general education. Prerequisites: None.	LEC	3	3
EXERSCI	288	WOMEN IN SPORTS	Surveys aspects of the historical and contemporary role of women in sport. Encourages an awareness in students regarding the differences between sport for men and women in various contexts, including social, psychological and biophysical. By examining the past and current practices and cultural norms in light of evolving research findings, students are expected to increase their understanding of issues germane to sport. This course earns two GEPs toward Goal 4 Cultures and Diversity and one GEPs toward Goal 6 Social Sciences in general education. Prerequisites: None.	LEC	3	3
EXERSCI	294	RESIST TRNG TECHNIQ	Study of the principles and techniques of resistance training. A complete foundation of the practical application of resistance training exercise. Development and understanding of resistance training program design. An understanding of various resistance training equipment and training methods. A basic understanding of weight training is necessary. Prerequisites: BIOLOGY.173 or Instructor Consent.	LEC	3	3

EXERSCI	306	PSYCHOLOGY OF SPORT	Aims to familiarize the student with psychological components of human performance related to sport and exercise. Focuses on sport participation and includes psychological assessment, intervention techniques and a brief introduction to the predominant research methods used in sport psychology. Course has particular value to coaches, teachers, psychologists and exercise specialists and other sport-affiliated professions.	LEC	3	3
EXERSCI	321	FIRST AID & SAFETY	Provides an opportunity to attain American Red Cross Cardiopulmonary Resuscitation (CPR), Automated External Defibrillation (AED), and First Aid certification for the adult, child, and infant. Students must be able to pass both the written and practical skills tests to be eligible for certification. This course includes both care for, and prevention of, a variety of emergency situations including, but not limited to, cardiac emergencies, breathing emergencies, sudden illness, environmental emergencies, soft tissue injuries, and injuries to muscles, bones, and joints. These topics are covered in relation to adults, children, and infants, and issues pertaining to other special populations of interest such as diabetics, pregnant women, people with disabilities, and those with language barriers are also covered. This course earns two GEPs toward Goal 10 Citizenship in general education. Prerequisites: None.	LEC	3	3
EXERSCI	351	KINESIOLOGY	Provides the students with a fundamental understanding of the laws of physics as they apply to human motion. Emphasis is placed on the kinematic analysis of common movements in sport and exercise. Students will learn to identify and discuss the various phases of motion and explain the mechanical significance of each in producing desired outcomes. Laboratory sessions are integrated into the meeting times throughout the semester. Prerequisites: EXERSCI 255 - Functional Anatomy with a C or better and PHYSICS 201 - Introductory Physics 1 with a D or better.	LEC	3	3
EXERSCI	360	SPORT NUTRITION	Provides students with the knowledge to address the role of nutrition in response to acute and chronic exercise. Learning topics will include nutrition for fitness and sport; human energy metabolism during acute exercise and exercise training; vitamin and mineral balance and exercise; and fluid and electrolyte balance during exercise. Three hours of lecture per week. May be offered in traditional and distance education formats. Prerequisites: C or better in BIOLOGY.205.	LEC	3	3
EXERSCI	378	EXERCISE PHYSIO I	Explores the function of how the body responds to the stress of acute and chronic physical activity and exercise. Concepts relating to energy metabolism, neuromuscular, circulatory and cardiorespiratory physiology are addressed in both lecture and laboratory experiences which include theoretical and practical applications to exercise. This course is intended to develop a student's understanding of how exercise impacts a number of bodily systems. Three hours of lecture per week and two hours of lab every other week. Prerequisites: Exercise Science Majors Only; Must have a C or better in BIOLOGY.173; Must have a C or better in BIOLOGY.174; CHEM.101.	LEC	4	4
EXERSCI	380	RES METHODS EX SCI	Introduces fundamental concepts of the methods, design, analysis and interpretation of research in the field of exercise science. Emphasis will be placed on comparing different research methods, statistical analysis techniques, and interpretation of data as they relate to various topics in exercise science, as well as developing competency in the use of available statistical software packages. The course is intended to prepare the student to be a critical consumer of new information and emerging trends in exercise science, as well as to understand and use research techniques in later career pursuits. May be offered online. Prerequisites: 60 earned credit hours.	LEC	3	3

EXERSCI	413	CURR ISSUE SPORT EX	Sharpens students' critical thinking and writing skills while interpreting and analyzing recent research in exercise science. Critically studies the most recent research in the area of exercise science and its subdisciplines, including exercise physiology, epidemiology and biochemistry. Deepens students' understanding of the development of a line of inquiry in exercise science and integrates and extends the information covered in the prerequisite courses. Prerequisites: BIOLOGY.173, BIOLOGY.174, EXERSCI.378 or permission of the instructor.	LEC	3	3
EXERSCI	414	EXER FOR SPECIAL POP	Provides students with a basic overview of theoretical, scientific and applied perspectives of exercise prescriptions of special populations. Practical experience, physical fitness programs and modified fitness programs will be introduced and incorporated in working with special populations. Prerequisites: EXERSCI 378.	LEC	3	3
EXERSCI	450	ECG-EXER TESTING	Provides students with both theoretical and practical knowledge of exercise testing in a research/clinical environment. Students gain knowledge in basic electrocardiogram interpretation for the normal and the diseased heart. A survey of cardiorespiratory structure and function will be provided. Prerequisite: EXERSCI.378, BIOLOGY.174 or equivalent or permission of the instructor.	LEC	3	3
EXERSCI	453	CLIN EXERCISE PHYS	Examines the use of exercise as a diagnostic, evaluative and rehabilitative tool for individuals with chronic diseases and disabilities. In addition, the underlying physiologic causes of various diseases and the identification of clinical symptoms will be examined, as well as the utility of exercise training to monitor and evaluate clinical progress. Prerequisite: EXERSCI 378 - Exercise Physiology I. May be offered online.	LEC	3	3
EXERSCI	477	EXERCISE PRESCRIPT	Emphasizes the academic and technical knowledge necessary to conduct health and fitness programs in public and private agencies. Students are prepared to assume leadership and management positions within the health and fitness industries. Prerequisite: EXERSCI.378.	LEC	3	3
EXERSCI	478	EXER PHYSIOLOGY 2	Builds directly on concepts learned in EXERSCI 378. This course emphasizes the understanding of physiologic principles related to healthy and diseased individuals, as well as the physiology of human performance. In addition, how exercise in different environmental conditions can impact physical performance. Prerequisite: A grade of "C" or better in EXERSCI.378 - Exercise Physiology I.	LEC	3	3
EXERSCI	498	INTERNSHIP EXER SCI	Provides the student with a practical on-site work experience in which technical skills and abilities are applied. Site is selected by the student with the approval of the major director. Required experience is designed to be the culminating experience of undergraduate course work and facilitates the transition from the role of student to employee. Prerequisites: BIOLOGY.173, BIOLOGY.174, EXERSCI.476, EXERSCI.477.	SUP	6	15
EXERSCI	500	INSTRUMENT LAB TECH	Provides experiences in the use of conventional technology and procedures in the measurement and assessment of physiological functioning and the maintenance and calibration of such equipment.	LEC	3	3
EXERSCI	513	CURR ISSUE SPORT EX	Sharpens students' critical thinking and writing skills while interpreting and analyzing recent research in exercise science. Critically studies the most recent research in the area of exercise science and its subdisciplines, including exercise physiology, epidemiology and biochemistry. Deepens students' understanding of the development of a line of inquiry in exercise science and integrates and extends the information covered in the prerequisite courses.	LEC	3	3

EXERSCI	514	EXERSCI SEMINAR	Provides graduate students with 1) the opportunity to become conversant in a variety of exercise science-related disciplines, with a special emphasis on exercise, health, and disease, 2) career development opportunities by interacting with faculty, peers, and outside speakers regarding current research and issues in a variety of disciplines in exercise science, 3) a forum in which they may present their own research, Master's Thesis proposals and defenses, and 4) the ability to critically read, present, question, and discuss the latest peer review published literature in the field of exercise science. This course is repeatable for credit. Prerequisites: None. Graduate level course.	SEM	1	1
EXERSCI	553	CLIN EXERCISE PHYS	Examines the use of exercise as a diagnostic, evaluative and rehabilitative tool for individuals with chronic diseases and disabilities. In addition, the underlying physiologic causes of various diseases and the identification of clinical symptoms will be examined, as well as the utility of exercise training to monitor and evaluate clinical progress. Prerequisite: EXERSCI 378 - Exercise Physiology I; admissions into the M.S. in Exercise Science Program. May be offered online.	LEC	3	3
EXERSCI	576	EXER PHYSIOLOGY 2	Provides a continuation of basic and advanced exercise physiology principles. Focuses on the respiratory system, cardiovascular dynamics, aging, and environmental effects on physical performance. Prerequisites: C or better in EXERSCI 575 - Exercise Physiology I.	LEC	3	3
EXERSCI	577	EXERCISE PROG ADMIN	Provides an in-depth study of various types of training programs, including the development of strength, power, endurance, agility, and speed. Specific emphasis will be placed on the application and integration of a variety of training methods to elicit adaptations based on an individual's needs analysis. Current legal, professional, and managerial issues relevant to the industry will also be discussed. Prerequisites: Admission to the M.S. in Exercise Science program.	LEC	3	3
EXERSCI	583	THERAPEUTIC EXERCISE	Examines evidence-based selection, application, and design of therapeutic exercise programs for injuries to the upper extremity, lower extremity, trunk, and spine. This course will encompass multiple methods, laboratory experiences, and techniques of therapeutic exercise including aquatic exercises. Prerequisites: Human Anatomy and Physiology I, II (BIOLOGY.173, BIOLOGY.174); Kinesiology (EXERSCI.351); Care and Prevention of Athletic Injuries (EXERSCI.282); Orthopedic Assessment I and II (EXERSCI.580, EXERSCI.581) Admission into the Entry-Level Master's Athletic Training Education Program.	LEC	3	3
EXERSCI	584	GEN. MED. COND. ATH	General Medical Conditions in the Athlete - Prepares the graduate athletic training student to use the diagnostic decision-making process. Topics include an evidence-based medicine approach to infections, influenza, skin disorders, and diseases of the body systems. This course includes a laboratory component that will develop psychomotor skills. Prerequisites: Human Anatomy and Physiology I, II (BIOLOGY.173, BIOLOGY.174); Kinesiology (EXERSCI.351); Care and Prevention of Athletic Injuries (EXERSCI.282); Admission into the Entry-Level Master's Athletic Training Education Program.	LEC	3	3
EXERSCI	592	SUPERVISED CLINIC II	A series of four courses which provide the student with a supervised athletic training experience in which clinical proficiencies are assessed. Each student is assigned a clinical education site and a clinical instructor. In addition to the clinical experience, laboratory sessions are conducted to assimilate classroom knowledge with clinical decision-making. The content focuses on knowledge, skills, and attitudes learned during the most recently completed semester in the clinical athletic training program, but also integrates material taught since the commencement of the program. Prerequisites: Admission into the Entry-Level Master's Athletic Training Education Program.	LEC	3	3

EXERSCI	595	ADULT FITNESS PRAC	Provides the student with a practical on-site work experience in which technical/clerical skills and abilities are applied. The site is selected by the student with the approval of the MS in Exercise Science Graduate Program Coordinator. Required experience is designed to be the culminating experience of graduate course work (for non thesis option) and facilitates the transition from the role of student to employee. Course may be repeated. Prerequisites: Admission to the M.S. program in Exercise Science	SUP	3	9
EXERSCI	599	THESIS	Research and independent preparation of a formal thesis in partial fulfillment of the requirements for the Thesis Option within the Master of Science degree in Exercise Science. May be enrolled in successive semesters for a varying amount of credit, but no more than 9 credit hours may be applied toward satisfying the requirements for the Master of Science degree (Thesis Option) in Exercise Science.	THE	1	9
FINANCE	120	PERSONAL FINANCE DEC	Presents information that students will find useful financially when they move through life, regardless of their career choices. The general topics covered are personal financial planning, socially responsible investing, consumer credit and protection, insurance (health, disability, liability, home, and automobile), investing principles and ethics, sources of capital, and retirement planning as they impact individuals and small business owners. The course emphasizes the link between personal financial decision making and responsibility citizenship. This course earns one GEP toward Goal 3 Quantitative Reasoning and two GEPs toward Goal 10 Citizenship in general education. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
FINANCE	313	INTRO CORPORATE FIN	This course covers introductory topics in the areas of corporate finance, investments, international finance, and financial institutions. The primary emphasis is on corporate finance. Topics in the corporate area include the time value of money, capital budgeting, working capital management, financial statement analysis, cost of capital, and capital structure. Investments topics include risk and return, valuation of securities, and financial markets and environments. This course is required for all business majors. May be offered in traditional and distance education formats. Prerequisites: ECONOMIC.121 and ECONOMIC.122 and (MATH 141 or ECONOMIC 256) and (ACCT 220 or ACCT 222) and (ECONOMIC 156 or MATH 123 or MATH.125).	LEC	3	3
FINANCE	323	FIN MARKETS & INSTIT	Studies short-term money market and long-term capital market instruments, major financial institutions, the relationship between interest rates and security prices and the role of the consumer and government in financial markets. Three lecture hours per week. May be offered in traditional or distance education formats. Prerequisite: FINANCE.313.	LEC	3	3
FINANCE	343	INVESTMENT MANAGMENT	Outlines principles of security investments including descriptions of investment instruments, investment planning, security valuation, portfolio theory and strategy and security markets. Three lecture hours per week. Prerequisite: FINANCE.313.	LEC	3	3
FINANCE	403	RETIREMENT & ESTATE PLANNING	Focuses on the importance of retirement planning, an evaluation of the client's needs, and an understanding of Social Security and Medicare, and qualified and non-qualified retirement plans. Estate planning focuses on retirement distributions from qualified plans and IRAs as well as essential information regarding tax and other laws that govern retirement benefits and distributions. Among other things, the use of employer-sponsored retirement plans, IRAs, trusts, and charitable gifts to achieve client goals and many important financial planning techniques used to help clients build a financially secure retirement. Prerequisites: ECONOMIC.121 Economics I; ECONOMIC.156 B & E Math or MATH.123 Essentials of Calculus; ECONOMIC.256 B&E Stats (or a comparable statistics course if required by the student's non-business major); and ACCT.220 Financial Accounting OR FINANCE.313 Introduction to Corporate Finance (required for Finance and other business majors) AND FINANCE.401 Personal Financial Planning is a recommended prerequisite for this course.	LEC	3	3

FINANCE	404	RISK MGT & INSUR	Introduces students to risk management and insurance decisions in personal financial planning. Topics include insurance for life, health, disability, property and liability risks, as well as annuities, group insurance, and long term care. The insurance industry and regulatory concerns are also addressed. Prerequisites: ECONOMIC.121 Economics I; ECONOMIC.156 B & E Math or MATH.123 Essentials of Calculus; ECONOMIC.256 B&E Stats (or a comparable statistics course if required by the student's non-business major); and ACCT.220 Financial Accounting OR FINANCE.313 Introduction to Corporate Finance (required for Finance and other business majors) AND FINANCE.401 Personal Financial Planning is a recommended prerequisite for this course.	LEC	3	3
FINANCE	413	INTERNATIONL FINANCE	Develops students' comprehensive understanding of the principles and practices relevant to the nature of international finance, its problems and its institutions. Discussion centers on sources and instruments of international export and import financing, balance-of-payments, exchange rates, governmental regulations and policies, financial management, as well as accounting for international transactions. Three lecture hours per week. May be offered in traditional and distance learning formats. Prerequisite: FINANCE.313.	LEC	3	3
FINANCE	423	SECUR ANALY/PORTFOLI	Detailed analysis of major elements related to determining the earnings and risk potential of securities and study of the underlying principles inherent to portfolio construction. Three lecture hours per week. Prerequisite: FINANCE.343.	LEC	3	3
FINANCE	454	ADV CORPORATE FINANC	Studies business financial problems and the development of financial decision-making tools and practices as used in the decision-making role of the financial manager. Three lecture hours per week. Prerequisite: FINANCE.313.	LEC	3	3
FINANCE	535	FINANCIAL MANAGEMENT	In-depth study of management activities involved in the financial aspects of business enterprise. Theoretical knowledge gained through exposure to financial management literature is applied to problem situations through the use of case studies and simulation techniques. Emphasis is placed on the development of perspective in the decision-making process with the acquisition of tools to facilitate effective decision making. Three lecture hours per week. Prerequisites: ACCT.524, MGMT.511	LEC	3	3
FRENCH	101	FRENCH 1		LEC	3	3
FRENCH	102	FRENCH 2	Develops further the four language skills: speaking, listening, reading, and writing to a proficiency level regarded as basic communication in French. FRENCH.102 is for students who wish to continue studying French at the second level. French language study is taught in its cultural context, including history, culture, diversity, and comparison with students' native culture. Practice in language laboratory and/or use of electronic language-learning media is required. FRENCH.102 is offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 8 Second Language in general education. Three hours lecture per week. Prerequisite: FRENCH.101 or equivalent proficiency level. This course is generally appropriate for students with one or two years of high-school French.	LEC	3	3

FRENCH	204	FRENCH 4	Develops the four language skills: speaking, reading, writing and listening. This course complements FRENCH 203 by expanding linguistic skills while enriching cultural understanding of the French speaking world. Basic grammar is reviewed and new grammatical concepts are presented. Contemporary culture in French-speaking countries is given additional emphasis. Students studying French should begin to synthesize their acquired linguistic and cultural knowledge toward an understanding of their native language and culture. This course is also designed to help prepare those students who would like to visit or study abroad in a French-speaking country. The three hours lecture per week and assignments employ a variety of learning activities. FRENCH 204 is a required course for the major and minor in Languages and Cultures: French, but is open to all students. It satisfies General Education Requirements: 2 GEPs for Goal 1 - Communication and 1 GEP for Goal 7 - Arts and Humanities. This course is offered once per year. Prerequisites: FRENCH 102 (French 2), or placement through the French Language Placement test, or permission of the instructor.	LEC	3	3
FRENCH	205	APPD PHON & PRONOUN	Analyzes French sound system. Drills on pronunciation and intonation. Selections of prose, poetry and songs for imitation. Not offered every semester. This course satisfies one additional course requirement from the approved list of communication courses for general education requirements/ This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: FRENCH.102 or equivalent.	LEC	3	3
FRENCH	212	FRANCE TODAY	Presents contemporary French and Francophone cultures and civilizations with emphasis on art, literature, ideas, recent historical events, and cultural exchanges. Intended for students seeking an introductory course on French-speaking cultures. Students gain insights in contemporary French and Francophone cultures, including geography, society, politics, philosophy, art, literature, and the sciences. Course is taught in English through lectures, projects, discussions, readings, and audio-visual media. FRENCH.212 partially fulfills the requirements for the French Minor. Course is offered in alternating semesters. This course earns two GEPs toward Goal 4 Cultures and Diversity and one GEP toward Goal 7 Arts and Humanities in general education. Prerequisites: None.	LEC	3	3
FRENCH	401	ADVANCED FRENCH LANG	Presents a thorough review of phonology, morphology, syntax and semantics. Practical application in advanced speaking including activities with development of cultural proficiency. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Not offered every semester. Prerequisite: FRENCH 203 or FRENCH 204 in combination with any 200 or 300 level FRENCH course (except for FRENCH 211 or 212), or equivalent course, or corresponding placement through the French Language Placement Test.	LEC	3	3
FYS	110	MYTHICAL MIDDLE EAST	Introduces incoming freshmen to an interdisciplinary study of topical content with a liberal arts focus and provides writing and research instruction to facilitate first-year students' success at the postsecondary level. Provides discussion of writing as a process (drafting, revision, editing); engages students in critical reading; and introduces effective research strategies and the use of source materials. Individual sections will complete a capstone project to demonstrate having achieved the student-learning objectives for the course. The Mythical Middle East: This course will explore our perceptions of the people and cultures associated with the Middle East, considering questions of historical accuracy and intentional bias. This course earns one GEP towards Goal 1 Communication and one GEP towards Goal 2 Information Literacy in general education. Prerequisite: Eligibility to schedule ENGLISH.101.	SEM	3	3
GENTRANS	401	MEDICAL IMAGING CLIN		CLN	0	0

GENTRANS	402	MED TECH CLINICAL		CLN	0	0
GENTRANS	403	NANOTECH PRACTICUM 1		LEC	6	6
GENTRANS	404	GEISINGER MED IMAGE		CLN	0	0
GENTRANS	406	NANOTECH PRACTICUM 2		LEC	6	6
GENTRANS	408	NANOTECH PRACTICUM 3		LEC	6	6
GENTRANS	409	EXCHANGE PROGRAM		LEC	0	0
GENTRANS	410	STUDY ABROAD		LEC	0	0
GERMAN	101	GERMAN 1		LEC	3	3
GERMAN	102	GERMAN 2	Develops further the four language skills: speaking, listening, reading, and writing to a proficiency level regarded as basic communication in German. GERMAN.102 is for students who wish to continue studying German at the second level. German language study is taught in its cultural context, including history, culture, diversity, and comparison with students' native culture. Practice in language laboratory and/or use of electronic language-learning media is required. GERMAN.102 is offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 8 Second Language in general education. Three hours lecture per week. Prerequisite: GERMAN.101 or equivalent proficiency level. This course is generally appropriate for students with two or three years of high-school German.	LEC	3	3
GERMAN	204	GERMAN 4	Develops the four language skills: speaking, reading, writing and listening. This course complements GERMAN 203 by expanding linguistic skills while enriching cultural understanding of the German-speaking world. Basic grammar is reviewed and new grammatical concepts are presented. Contemporary culture in German-speaking countries is given additional emphasis. Students studying German should begin to synthesize their acquired linguistic and cultural knowledge toward an understanding of their native language and culture. This course is also designed to help prepare those students who would like to visit or study abroad in a German-speaking country. The three hours lecture per week and assignments employ a variety of learning activities. GERMAN 204 differs from GERMAN 203 in the selection of topic area. GERMAN 204 is a required course for the major Languages and Cultures: German, but is open to all students. It satisfies General Education Requirements: 2 GEPs for Goal 1 - Communication and 1 GEP for Goal 7 - Arts and Humanities. This course is offered once per year. Prerequisites: GERMAN 102 (German 2), or placement through the German language Placement Test or permission of the instructor.	LEC	3	3
GERMAN	206	COMP & CONV 1	A comprehensive intermediate German course, which develops writing, reading, speaking and listening skills in the German language, and which expands knowledge of German-speaking cultures. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Not offered every semester. Prerequisite: GERMAN.204 or equivalent.	LEC	3	3

HISTORY	121	US HIST COL TO 1877	Explores the founding and growth of the American Republic from the Pre-Columbian era to the end of Reconstruction (1877) in the North American colonies and the United States. Major topics include: the peoples and societies of early America; the American Revolution and early republic; national growth and expansion, sectional conflict; Civil War; and Reconstruction. Three hours per week. Open to all students. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisites: None.	LEC	3	3
HISTORY	122	US HIST 1877 PRES	Explores the history of the United States from the end of Reconstruction to the present. Students will gain an understanding and appreciation of the historical significance of this time period in American history. Major topics include: The American West, the rise of urban-industrial America, reform traditions, the emergence of the United States as a world power, and American foreign and domestic affairs. Three hours per week. Open to all students. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisites: None.	LEC	3	3
HISTORY	125	WESTERN CIV TO 1650	Surveys the development of Western Civilization from river-valley societies to the end of the early modern period (c.4000 BCE-1650 CE). Open to all students. Prerequisites: None. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Three hours of lecture per week. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
HISTORY	126	WEST CIV FROM 1650	Open to all students. Prerequisites: None. This course earns three GEPs toward Goal 4 (Cultures and Diversity) in general education, and fulfills requirements for the History major and minor. Three hours of lecture per week.	LEC	3	3
HISTORY	132	ASIAN CIV SINCE 1500	Surveys the major civilizations of Asia from the sixteenth to the twentieth century. This course examines inter-Asian relations and the developing political, economic, and cultural relations between the West and Asia through the twentieth century, presenting an overview of the different Asian paths to independence during the twentieth century. Three hours of lecture per week. Open to all students. This course fulfills requirements for the History major and minor and earns three GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisites: None.	LEC	3	3
HISTORY	141	MODERN EAST ASIA	Surveys the history of China, Japan, and the Korean peninsula from the seventeenth to the mid-twentieth century. Modern East Asia examines the political, social, cultural, and economic development of China, Japan, and the Korean peninsula before, during, and at the end of imperialism and colonialism in East Asia. This course is recommended for history majors and minors taking upper level courses in modern East Asian history. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Three hours lecture per week. Open to all students. Prerequisites: None.	LEC	3	3
HISTORY	145	MUSLIM WORLD TO 1405	Surveys the development of the Muslim World (primarily the Middle East, North Africa and the Iranian plateau) from sixth to the beginning of the fifteenth century. Open to all students. This course applies to General Education Goal 4, and fulfills requirements for the History major and minor. Prerequisites: None. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Three Hours Lecture Per week.	LEC	3	3
HISTORY	146	MUSLIM WLD SINCE 1405	Surveys the development of the Muslim World (primarily the Middle East, North Africa and the Iranian plateau) from the fifteenth to the twenty-first century. Open to all students. This course applies to General Education Goal 4, and fulfills requirements for the History major and minor. Prerequisites: None. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Three Hours Lecture Per week.	LEC	3	3

HISTORY	223	ECON HISTORY US	Focuses on the changing nature of the American economy. This course covers three time periods: the commercial-agricultural age, the industrial age and the modern managerial age. Examines agriculture, banking, business administration, commerce, labor, manufacturing, mining and transportation, social and political factors that contributed to changing economic relationships in the United States. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	SEM	3	3
HISTORY	228	AFRO-AMERICAN HIST	Examines the nature and meaning of the African-American experience in the United States surveyed from its African beginnings to the present. Reviews black creative expressions in the visual arts, music, literature, philosophic thought and social history. Addresses questions such as: Why did slavery emerge in colonial America? How did free African Americans and slaves shape the American colonies and affect American Revolution? Why was the South so dependent on slavery that southerners were willing to secede from the Union to preserve it? What was Reconstruction? Why did segregation and Jim Crow laws emerge? How did race shape the black experience with the Great Depression or World War II? What was the Civil Rights movement? This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisites: None.	LEC	3	3
HISTORY	229	MODERN WORLD LEADERS	Studies significant world leaders in religion, politics, war and culture and their impact on world history. Focuses on different leaders each time offered and covers a selected period from the Renaissance to the present. Analyzes the conditions which helped produce these leaders and ends by discussing reasons for their success or failure. Includes only leaders who have made a significant contribution outside their national boundaries. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	LEC	3	3
HISTORY	298	HISTORIO/HIST METH	Provides students with an opportunity to take a critical approach to the study of history by examining changes in historical interpretations to analyze why history is written and revised. Affords students hands-on experience in historical research, utilizing libraries, archives, databases and Internet resources. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisites: ENGLISH.101 and one 100-level course in History.	SEM	3	3
HISTORY	320	FRENCH REV & NAPOL	Analyzes 1789-1815 era in France and assesses its significance for the history of France and the world. This course counts as a Group A, Humanities and The Arts General Education Requirements. Not offered every semester. Three hours lecture per week. Prerequisite: HISTORY.126.	SEM	3	3
HISTORY	335	HIST OF CHRISTIANITY	Promotes student analysis of the ancient, medieval and modern roots of contemporary Christian denominations and movements. Primary and secondary historical sources are discussed seminar-style in order to critically examine important ideas, personalities and historical conditions of Christianity. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: Any course in history or consent of the instructor.	SEM	3	3
HISTORY	347	HIST OF HOLOCAUST	Focuses upon the major theme-the genesis and implementation of the planned destruction of European Jewry from 1933 to 1945; briefly traces the history of anti-Semitism and evaluates scope of prejudice, discrimination and genocide in contemporary civilization. Includes an analysis of literature of the Holocaust and evaluation of the Holocaust's impact on modern-day Israel or the world Jewish community. May be offered in traditional and distance education formats. This course counts as a Group A, Humanities and The Arts General Education Requirements. Not offered every semester. Three hours lecture per week. Prerequisites: None.	SEM	3	3

HISTORY	360	MODERN KOREA	Surveys the history of the Korean peninsula from King Kojong's reign (1864-1907) to the present. Modern Korea examines the search for internal reform in the face of Western and Japanese imperialism during the late-nineteenth and early-twentieth century before turning to the legacy of Japanese colonial rule (1910-1945) over the peninsula and the subsequent division between North Korea and South Korea after 1953 present. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisites: None.	SEM	3	3
HISTORY	381	CIV WAR, RECON & IND	Surveys the causes of the Civil War, the war itself, and reconstruction. Topics include politics, ideology, military technology and tactics, race and gender issues, the economy, labor, immigration and popular culture. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	SEM	3	3
HISTORY	383	AMERICA 1877-1929	This course focuses on the transformation of American life from the Gilded Age through the Roaring Twenties. Between 1877 and 1929 the United States experience rapid industrialization, massive immigration, and a social revolution that transformed morals and manners in the 1920s. In government, the era witnessed political upheavals that led to Progressivism, an early twentieth century reform movement that laid the foundations of the modern American state. In addition, the country took its first steps toward world power, a trend that culminated with U.S. entry into the First World War. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	SEM	3	3
HISTORY	385	RECENT AMERICAN HIST	Examines the major political, economic, social-cultural and intellectual developments in the United States from 1941 to the present. Cold War, Korea and Vietnam, turmoil of the 1960s, nuclear concerns and the role of the individual in an increasingly complex, technological society are some of the major themes examined. This course counts as a Group A, Humanities and The Arts General Education Requirements. Not offered every semester. Three hours lecture per week.	SEM	3	3
HISTORY	397	INDEPENDENT STUDY	The topic selected must be approved by a committee appointed by the chairperson. Independent reading and/or research related to some aspect of history is supervised by an appropriate member of the department. A student may register for this course no more than twice and credits may not exceed 4 semester hours. See the section on Independent Study. Prerequisite: 60 semester hours. Prerequisites: HISTORY.298 or consent of the instructor.	IND	1	4
HISTORY	398	RESEAR & WRIT SKILLS	Focuses on the development of proficient research and writing skills. Students learn to fully utilize library and research facilities; develop skills in analyzing and interpreting original/primary research documents; and produce a clear, concise and well-written lengthy formal paper. In addition, students develop an understanding of how and why history is written and revised. This course earns one GEP toward Goal 1 Communication and one GEP toward Goal 2 Information Literacy and one GEP toward Goal 6 Social Sciences in general education. Three hours lecture/ discussion per week. Required for history majors and open to other students who fulfill the prerequisite requirements. Prerequisites: HISTORY.298 with a "C" or better.	SEM	3	3
HISTORY	456	MODERN MIDDLE EAST	Surveys the developments in the history of the Middle East (including Egypt and the Iranian plateau) from the sixteenth to the twenty-first century (with particular emphasis on the post-nineteenth century period) through critical analysis of primary documents and historical accounts of the region. Open to all students. This course applies to General Education Goal 4, and fulfills requirements for the History major and minor. Prerequisites: None. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Three Hours Lecture Per week.	SEM	3	3

HISTORY	497	INTERNSHIP HISTORY	Provides a work-study experience jointly administered by an academic faculty member and a sponsoring employer, with about 40 hours of supervised work generating each semester hour. Prerequisite: For history majors, 15 semester hours of history, including HISTORY.398. Other majors may enroll with consent of advisers. Note: A student may not apply more than 3 semester hours of internship toward the fulfillment of the history major, although a student may enroll for more than 3 semester hours of HISTORY.497.	SUP	3	12
HONORS	101	HONORS HUMANITIES 1	Allows freshmen and sophomore level students to focus on a specific topic or related topics in the humanities for in-depth study and analysis. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic and the expression of those ideas in written and oral form. This course counts as a Group A, Humanities and The Arts General Education Requirements.	LEC	3	3
HONORS	104	HONORS ED, SP TOPICS	Outlines the methods, strategies, understandings, and attitudes essential in dealing with all constituent groups found in a work environment. Discusses recognizing and understanding communication styles. Reviews the position of verbal communication, nonverbal communication, and written communication within the workplace. Cultivates communication skills in regards to conversation, group dynamics, technology, and cultural differences and sensitivities. Explores the navigation of conflict, constructive criticism, and negotiations in the work setting to include interactions with all constituents including administrators, parents, support staff and students. This will occur in a blend of homogeneous and heterogeneous environments. Prerequisites: Admission in the Honors Program.	LEC	3	3
HONORS	152	HONORS LIT & SOCIETY	Focuses on a particular theme, social issue, ethical dilemma, or area of study or work through readings (and/or screenings) of a range of texts. Provides a literary lens through which to explore the chosen topic; focus varies with instructor. The course is designed as an accelerated learning experience for honors students and is conducted in a combination of lecture and discussion, and formal and informal writing assignments. All students will submit at least one artifact to their Honors ePortfolio. Open to Honors students and others at the discretion of the Honors Program. Not applicable toward a major in English. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Offered on a yearly basis.	LEC	3	3
HONORS	171	HONORS JAMAICA CLE	Provides an opportunity for Honors students to partially fulfill the Program service requirement; to become immersed in, experience, and learn about a different culture; to offer basic assistance to people in need; and to practice good citizenship on a global scale. Offered during the university Spring break at an additional cost to students. Prerequisites: Open only to Honors students. This course earns one GEP toward Goal 4 Cultures and Diversity and one GEP toward Goal 10 Citizenship in general education.	ACT	0	0
HONORS	230	HONORS SOCIAL SCI 2	Allows students to focus on a specific topic or related topics in the social sciences for in-depth study and analysis. Topics vary from semester to semester. Requires extensive reading on a chosen topic, the development of the students' own ideas on the topic and the expression of those ideas in written and oral form. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements.	SEM	3	3

HONORS	300	INTRO HONORS RESEARC	Focuses on the development of research and writing skills through the development of an independent research proposal. Students will take and pass Institutional Review Board training through Bloomsburg University; learn to fully utilize library and research facilities; develop a literature review; correctly document all sources; effectively communicate a research proposal in written and oral formats. Required of all Honors students before beginning honors research. The student research proposal will meet the approval of the instructor and the Honors Program Director. This course earns one GEP toward Goal 2 Information Literacy in general education. May be offered in traditional and distance education formats.	LEC	1	1
HONORS	301	HONORS SEM VALUES	Features study of a selected topic that will change with each offering. Upper division seminar focuses on values and ethical issues and may be taught by professors from any of the colleges or Arts and Sciences divisions. This course approved as 3 credits of Values, Ethics and Responsible Decision Making toward general education requirements.	LEC	3	3
INSTTECH	460	MULTIMEDIA PROD	Examines the guidelines and techniques for the development of instructional multimedia as well as research and theories of multimedia design. Students work with a variety of multimedia development tools to create multimedia elements. Aspects of multimedia explored within this course include visual design, multimedia presentation production, digital audio production, digital image production, digital video production, and copyright guidelines. Specific emphasis is given to the design, development, and application of various multimedia elements. Three hours lecture per week. Prerequisites: None.	LEC	3	3
INSTTECH	465	LEADING CL & V TEAMS	Provides skills needed to take a leadership role for project teams and work groups that are collocated (with all team members working in one location), "virtual" (using online tools and other systems to bring together team members who are separated by distance, time and culture) or "blended" (using a combination of both). Students will develop proficiency in the concepts and skills required to effectively deal with the unique issues that can arise in team communication, relationship building, collaboration and crisis management. May be offered in traditional and distance education formats. Prerequisites: 60 Semester hours completed or permission of instructor.	LEC	3	3
INSTTECH	467	TECH LEAD CAP II	Explores topics such as leadership styles, change and conflict management, training programs, program proposals, and internal consulting. Activities will help students relate these concepts to workplace demands and present current issues in technical leadership. In this course, student teams will work to create a team-based capstone project that will be presented to an Advisory Board of technical professionals. Prerequisites: Technical Leadership majors only and senior status or permission of instructor.	LEC	3	3
INSTTECH	470	INTRO TO WEBSITE DEV	Provides a comprehensive overview of the technologies, processes and issues encountered by front-end web developers in web projects. The current front-end web languages, HTML, CSS, and JavaScript will be used to create web sites, and industry-standard web editors will be introduced. The Web development process is applied and issues related to web development will be explored. Three hours lecture per week. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
INSTTECH	472	INTRO TO AUTHORING	Acquaints students with authoring tools used to develop training applications that may be implemented online and/or by way of mobile devices. Authoring software will be used to develop interactive simulations and training module frameworks. All elements of course work are reviewed and developed with emphasis on good design, programming techniques, and learner effort. Writing code for specific applications or deployment is not a requirement or any part of this course. Three hours lecture per week. Prerequisites: None.	LEC	3	3

INSTTECH	490	TECH LEAD INTERN	Provides an opportunity for students to integrate concepts and skills obtained in courses with practical experience that includes projects, activities and assigned responsibilities in a professional workplace. Internship activities must be directly related to the general content of the Technical Leadership program and be supervised by a professional in the student's field. Prerequisites: INSTTECH.466 or permission of Instructor.	SUP	3	6
INSTTECH	540	TECH PLANNING CURRIC	Examines a systematic process for the selection, use, and evaluation of technology within the curriculum. Students develop strategies and explore methods to implement educational technology plans at the classroom, building, and district levels. Consideration is given to a number of issues that affect the procurement and use of technology in schools. Students learn the roles and responsibilities of becoming a technology director, technology coach, instructional technology specialist, or other related position within an educational environment. Three hours lecture per week. Prerequisites: None.	LEC	3	3
INSTTECH	550	INSTRUCTIONAL DESIGN	Examines the systems approach for the design, development, and evaluation of instruction and training materials. Students use an instructional design process to create a training prototype. Components of this project include a needs assessment, instructional analysis, objectives, instructional strategies, and the development of a teacher's guide and student materials. Specific emphasis is given to applying instructional design techniques to the design and development of instructional products. May be offered in traditional and distance education formats. Prerequisites: Graduate Standing.	LEC	3	3
INSTTECH	551	ADV INSTRUCT DESIGN	Serves as a sequel to INSTTECH.550 Instructional Design by providing additional information and practice concerning the design of effective instruction. Course goes beyond the introductory course by elaborating on the design of instructional strategies for specific learning outcomes, techniques for writing effective test items, and procedures for formative and summative evaluation. In addition, the course emphasizes learning theory, cognitive and behavioral approaches to instruction, comparison of instructional design models and research evidence that supports instructional design practices. Three hours lecture per week. Prerequisites: INSTTECH.550 or permission of Instructor.	LEC	3	3
INSTTECH	560	MULTIMEDIA PROD	Examines the guidelines and techniques for the development of instructional multimedia as well as research and theories of multimedia design. Students work with a variety of multimedia development tools to create multimedia elements. Aspects of multimedia explored within this course include visual design, multimedia presentation production, digital audio production, digital image production, digital video production, and copyright guidelines. Specific emphasis is given to the design, development, and application of various multimedia elements. Three hours lecture per week. Prerequisites: None.	LEC	3	3
INSTTECH	565	LEADING CL & V TEAMS	Provides skills needed to take a leadership role for project teams and work groups that are co-located (with all team members working in one location), "virtual" (using online tools and other systems to bring together team members who are separated by distance, time and culture) or "blended" (using a combination of both). Students will develop proficiency in the concepts and skills required to effectively deal with the unique issues that can arise in team communication, relationship building, collaboration and crisis management. Students taking this course on the graduate level will also research various models for building collaboration and accountability for virtual project teams. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3

INSTTECH	570	INTRO TO WEBSITE DEV	Provides a comprehensive overview of the technologies, processes and issues encountered by front-end web developers in web projects. The current front-end web languages, HTML, CSS, and JavaScript will be used to create web sites, and industry-standard web editors will be introduced. The Web development process is applied and issues related to web development will be explored. Three hours lecture per week. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
INSTTECH	572	INTRO TO AUTHORING	Acquaints students with authoring tools used to develop training applications that may be implemented online and/or by way of mobile devices. Authoring software will be used to develop interactive simulations and training module frameworks. All elements of course work are reviewed and developed with emphasis on good design, programming techniques, and learner effort. Writing code for specific applications or deployment is not a requirement or any part of this course. Three hours lecture per week. Prerequisites: None.	LEC	3	3
INSTTECH	575	MAN MULTIMEDIA PROJ	Provides a project design experience in the Instructional Technology curriculum. Students work on a team to apply concepts and skills learned in previous courses to simulate a hypothetical business environment where they must respond to a mock request for a proposal in the field of eLearning. Student teams use a systems approach to design, develop, and propose a comprehensive interactive eLearning project complete with budget and prototype. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites or Corequisites: INSTTECH.551.	LEC	3	3
INSTTECH	581	SP Topics in INSTTECH		LEC	3	3
INSTTECH	590	GRADUATE INTERNSHIP	Allows students to put into practice the theories that they have learned in previous courses. Each internship must last at least 6-12 weeks in duration, be directly related to the general content of the master's program, and be supervised by a professional in the multimedia field. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	SUP	3	6
INTERBUS	101	INTERBUS 101	Prepares first year business students to participate in a number of designated activities designed to help them explore disciplines, careers, professional organizations and occupational goals in business. This course satisfies the COB Professional Development program's requirements that are primarily co-curricular. Students must complete at least four different required professional development activities that achieve the three learning objectives. Prerequisite: College of Business Student.	ACT	0	0
INTERBUS	102	INTERBUS 102	Prepares first year business students to participate in a number of designated activities designed to help them explore disciplines, careers, professional organizations and occupational goals in business. Students must complete at least four different required professional development activities that achieve the three learning objectives. This course satisfies the COB Professional Development program's requirements that are primarily co-curricular.	ACT	0	0
INTSTUDY	100	UNIVERSITY SEMINAR	Promotes a successful transition to college life for new freshmen through the presentation of critical information about the university's academic program.	SEM	1	1

INTSTUDY	108	FORENSICS PRACTICUM	Provides students with the opportunity to learn various forms of debate, public speaking, and dramatic interpretation of literature. The ultimate goal of forensics participation is to help students become better communicators and to think critically. The Forensics Practicum will provide students with a valuable practical experience in a co-curricular activity that will assist any major in speaking situations. This will be accomplished through participation in competitive intercollegiate speech and debate tournaments. Grade awarded each semester. May be repeated. Prerequisites: None.	LEC	1	1
INTSTUDY	201	SEL PROGRAM	An opportunity for students in their sophomore year to engage in experiential learning in their chosen field of study. The goal of the program is to become familiar with new professions and job fields; be exposed to career or industry ideas; and begin to build a network of professional contacts. Students must complete a 3-5 day shadow in order to complete this program.	SUP	0	0
INTSTUDY	231	TECHNICAL WRITING	Examines the significance of writing in discipline-specific genres using multiple media to produce documents that are rhetorically astute and ethically appropriate. The ability to develop and manage information in the 21st century, is a central component of the course. This will be accomplished through lecture, course discussion, and group based projects that require both writing and software skills relevant in our current professional climate. This course will be offered during fall and spring semesters, as well as be offered during the winter term and summer sessions.	LEC	3	3
INTSTUDY	477	IND STUDY BUS 2		IND	3	3
ITALIAN	102	ITALIAN 2	Develops further the four language skills: speaking, listening, reading, and writing to a proficiency level regarded as basic communication in Italian. ITALIAN.102 is for students who wish to continue studying Italian at the second level. Italian language study is taught in its cultural context, including history, culture, diversity, and comparison with students' native culture. Practice in language laboratory and/or use of electronic language-learning media is required. ITALIAN.102 is offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 8 Second Language in general education. Three hours lecture per week. Prerequisite: ITALIAN.101 or equivalent proficiency level. This course is generally appropriate for students with one or two years of high-school Italian.	LEC	3	3
ITM	175	ITMA	Presents an overview of information concepts through a variety of quantitative problem solving experiences using spreadsheet and database programs. Introductory business and statistical models are examined, as students identify appropriate ways to find, evaluate, and ethically use information in aid of decision-making. Examples may include budgeting, surveys, descriptive statistics, simple regression and correlation models, time value of money problems, and order entry and inventory models. This course is a core course for business students and may be taken by students in any discipline for general education points. This course earns two GEPs toward Goal 2 Information Literacy and one GEP toward Goal 3 Quantitative Reasoning in general education. Three hours lecture per week. Prerequisites: None.	LEC	3	3
ITM	302	ENHANCED BUS APPS	Introduces the procedural design and development concepts of business applications and basic object-oriented programming. Both procedural and object-oriented programming will be covered utilizing Visual Basic (VBA) and several puzzle visual environments. This course is required for Information and Technology Management Major and Minor. It is also suitable as an elective for undergraduate students interested in business or mobile application development. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: Minimum of 30 credit hours due to the degree of analysis and the expectation of performance or instructor approval.	LEC	3	3

ITM	321	ITM	Emphasizes technical skills and analytical thinking for understanding and applying business technologies. This course also explores current information technology (IT) trends, issues, and challenges facing business and information technology professionals around the world. Prerequisites: 30 earned credits or instructor approval.	LEC	3	3
ITM	322	PJT MGT	Introduces the concepts and techniques of project management: applications include information systems, healthcare, finance, and business projects. Covers project management processes, methods, tools, success factors and successful team building strategies as well as the phases of project management: project initiation, planning, executing, monitoring and controlling, and project closure. The course follows the principles set forth by the project management body of knowledge (PMBOK) as defined by the Project Management Institute (PMI). Project Management is designed for students in junior or senior standing and includes case analyses and projects throughout the semester to supplement the student learning objectives. Project management is a required course in the ITM Major and in the Bachelor of Applied Science Technology Leadership program. May be offered in traditional and distance education formats. Prerequisites: ITM.175 and MGMT.244 or permission from instructor. Three lecture hours per week.	LEC	3	3
ITM	330	TELECOMMUNICATIONS	Provides a framework for understanding telecommunications functionality, characteristics, and configurations. Topics covered are telecommunications, network topologies, protocols, and architectures and emerging telecommunication trends within organizations. Management Strategies for telecommunication planning, implementation, deployment, and security are introduced. Three lecture hours per week. Prerequisite: Students need to have a basic understanding of computer technology and the Microsoft Office Suite or equivalent for the content of this course...thus the prerequisite ITM.175, or the alternative courses MISCIS.150 or COMPSCI.110.	LEC	3	3
ITM	375	DATA-DRIVEN WEB DEV	Analyzes current practices, trends, and innovations in the interface between business websites and business application databases. Explores data-driven design principles for the creation of enterprise data collection to support both business operations and analytics. Prerequisites: ITM 310 - Data Mgmt Essential for Business or permission of the instructor.	LEC	3	3
ITM	405	TRAINING & DEVELOP	Application of theories of learning and instructional development to the education and training of employees in organizations. Topics include instructional design, strategies, technology and the implementation, evaluation and management of training in an organizational environment. Three lecture hours per week. Prerequisite: Senior standing.	LEC	3	3
ITM	407	HTIM	Provides a broad and comprehensive overview and offers specific background relating to various approaches in assessing, analyzing, designing, implementing and evaluating technology applications and ergonomics. The dynamics of human and technology interaction management are examined with a blend of theory and practice. May be offered in traditional and distance education formats. Three lecture hours per week. Prerequisites: 75 or more credits.	LEC	3	3

ITM	408	SYSTEMS SEC MGMT	Emphasizes emerging technologies and methods relating to network, data, and systems security from a global perspective. The course explores methods for identifying the threats and vulnerabilities in order to provide comprehensive security for network functions and configurations, information retrieval and storage, and secure software operations. In addition, the legal, ethical, and privacy issues in information systems are introduced. This course is required for Information and Technology Management Major and Minor. It is also suitable as an elective for undergraduate students interested in enterprise security. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: Minimum of 60 credit hours due to the degree of analysis and the expectation of performance or instructor approval.	LEC	3	3
ITM	409	CASES IN ITM	As a capstone course, this class involves the analysis, synthesis, evaluation and application of advanced concepts, theories, principles and skills associated with information technologies (IT) or other comprehensive organizational and information systems. It is designed as a capstone experience through case studies for developing the solution to business problem and redesigning business processes. This required course is ideally taken in the student's last semester before graduation. Three lecture hours per week. Prerequisites: senior standing, ITM.322, ITM.405, ITM.407.	LEC	3	3
ITM	468	HEALTH INFORMATICS	Health Informatics (HI) focuses on the application of information technology (IT) to the field of medicine to improve individual and population healthcare delivery, education and research. This course will approach health informatics from three perspectives; clinical, technical, and managerial. Topics will include but not limited to: Clinical Systems (Electronic Medical Records (EMR), Computerized Physician Order Entry (CPOE)), Regulations and Data Exchange (HIPPA, HL 7), Provider and Payer interactions, and concepts from industry certifications. Prerequisites: None.	LEC	3	3
LANGCULT	200	COMP CULTURAL ST	Examines the dynamic processes by which our direct interaction with foreign cultural products language, texts, performances and other representation systems -influence how we, as language learners, see and understand the world and our place in it. LANGCULT.200 presents world culture in its historical contexts through lectures, projects and discussions. LANGCULT.200 is required for all students majoring in Languages and Cultures. Prerequisites: None. Course is offered in alternating semesters. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education.	LEC	3	3
LANGCULT	350	FOR LANG METHODOLOGY	Introduces students to theories and methods associated with the effective teaching of second languages. Designed primarily for undergraduate and graduate students planning a career as second language teachers, but open to all students interested in learning the fundamentals of second language teaching and learning. Practices creating effective second language lesson plans and incorporating the second language proficiency assessment methods of the American Council on the Teaching of Foreign Languages (ACTFL). Students participate directly in second language instruction (face-to-face and distance education). At the graduate-level, students construct research projects to investigate second language learning/teaching effects. Offers 1 GEP in Goal 1: Communication, and 2 GEPs in Goal 4: Cultures and Diversity. The course has no prerequisites at the undergraduate level. At the graduate level, the course requires permission from the Department of Teaching and Learning.	LEC	3	3
LANGCULT	397	SERV LEARN LANG	Applies knowledge of a second language to promote world languages in the community. Under the guidance of a faculty member in the Department of Languages and Cultures, university students prepare and carry out interactive lessons in after-school groups of students in grades K-8 and keep a record of their learning experiences as active advocates for world languages. This course may be repeated for a maximum of 2 GEPs for Goal 10. Prerequisites: An advanced intermediate level language course (minimum 204) or permission of the instructor.	LEC	0	1

LANGCULT	400	COMP LANG STUDIES	Explores language acquisition and linguistic diversity. Topics will include cognitive, historical and cultural aspects of language and linguistics. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: LANGCULT.200. Three hours lecture per week.	LEC	3	3
LAW	120	PERSONAL LAW	Examines of the areas of the law that are likely to have a direct bearing on a person's life. Student participation required in considering the legal issues associated with relationships (marriage, divorce, adoption), finances (rental and credit card agreements, mortgages), work (employment contracts and liability), citizenship (the court system, law making process, and individual rights and responsibilities) and the hereafter (wills and trusts). Recommended for all students, regardless of major field of interest. Three hours lecture per week. This course earns one GEP toward Goal 2 Information Literacy, one GEP toward Goal 6 Social Sciences and one GEP toward Goal 10 Citizenship in general education. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
LAW	331	LAW & LEGAL ENVIRON	Covers the structure of the American legal, constitutional, and regulatory system, the nature and sources of law, the courts and dispute resolution, and the principles of law applicable to business, including administrative law, the common law of contracts, torts and products liability, property, intellectual property, crimes, employment and labor law, environmental law, consumer protection, antitrust law. Three hours lecture per week. May be offered in traditional and distance education formats. Prerequisites: 30 credit hours.	LEC	3	3
LAW	332	BUS & COMMERCIAL LAW	Presents basic principles of commercial law (UCC), agency and such topics as debtor/creditor relations, business organizations and securities regulation, bankruptcy and ethics. Three hours lecture per week. May be offered in traditional and distance education formats. Prerequisite: LAW.331.	LEC	3	3
LAW	336	LEGAL ASP OF FRAUD	The course covers the practical, legal and ethical considerations involved in the conduct of a fraud examination addressing the rules of evidence and civil and criminal procedure; rules concerning proof of intent and obstruction of justice; and the major federal statutes relevant to fraud investigation. Professional standards of fraud examiners will be studied and, current cases examined. Three hours lecture per week. Prerequisites: 60 hours of credit must be earned before taking this course; LAW.331 is highly recommended, but not required	LEC	3	3
LAW	460	EMP DISCRIM	A survey of major federal laws that address equal opportunity in employment and focuses on types of job discrimination outlawed by Title VII of the 1964 Civil Rights Act. Legal and ethical issues relating to affirmative action programs are discussed, as are state and local laws addressing employment discrimination. This course is approved as a Diversity General Education Course. Prerequisite: LAW.331.	LEC	3	3
MASSCOMM	120	EMERGENT MEDIA IN MC	Explores history and foundational principles of emerging media in the Mass Communications field. This foundational level course develops undergraduate students' media and information literacy knowledge and skills, and prepares them for an expanding technological society. The course is required for students majoring in Mass Communications, is open to non-majors, and has no prerequisites. Three hours of lecture per week. This course earns one GEP toward Goal 1 Communication, one GEP toward Goal 2 Information Literacy and one GEP toward Goal 4 Cultures and Diversity in general education. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3

MASSCOMM	220	MULTI IN MASS COMM I	Introduces students to the world of online multimedia from the perspective of mass communication. The primary emphasis of the course is the design and development of websites, implementing web design technologies to craft messages for digital audiences. Students learn how to code with HTML and CSS and employ contemporary design standards to their projects. This course is an elective for students majoring in Media and Journalism and can be used for the Emergent Media minor. This course earns one GEP toward Goal 1 - Communication, one GEP toward Goal 3 - Analytical and Quantitative Skills, and one GEP toward Goal 7 - Arts and Humanities. Prerequisites: None.	LEC	3	3
MASSCOMM	230	NEWSWRITING	Offers theory and techniques of news writing and reporting for mass media, especially for the print journalism audience, including organizational characteristics of news stories and skills for gathering news materials. This course is required for students majoring in Mass Communications. This course is open to non-majors as Gen. Ed. Three hours of lecture/lab per week. This course earns two GEPs toward Goal 1 Communication and one GEP toward Goal 2 Information Literacy in general education. May be offered in traditional and distance education formats. Prerequisites: ENGLISH 101.	LEC	3	3
MASSCOMM	241	ON-LINE JOURNALISM	Introduces how to write stories and publish them with diverse online media tools, including blogs and social media. This course also introduces how to promote and manage news content disseminated through new forms of digital media. This course builds upon MASSCOMM.230, which focuses on news writing. This is an elective for students majoring in Mass Communications. May be offered in traditional and distance education formats. Three hours of lecture/lab per week. Prerequisite: MASSCOMM.230.	LEC	3	3
MASSCOMM	251	PR: THEORY & PRACT	Introduces the principles, theories and practice of public relations in the contemporary environment. Course examines public relations definitions, theories and addresses the profession, including various structures and sub-disciplines. Course allows students to accrue 2 GEP's in Goal 1 - Communication, and 1 GEP in Goal 2 - Information Literacy. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: None.	LEC	3	3
MASSCOMM	271	VIDEO PRODUCTION I	Concentrates on the knowledge and physical use of technical requirements that operate the growing range of equipment needed to produce contemporary television and video programs both in the studio and in the field. This course is required for students majoring in Mass Communications. The course is only open to majors. Three hours of lecture per week. Prerequisites: None.	LEC	3	3
MASSCOMM	275	CINEMA APPRECIATION	Examines film form, theory and criticism to help bring about a better understanding and greater appreciation of the motion picture. This course is devoted to a diverse cultural mass medium that is the cinema and both the production of culture via a wide variety of film traditions and the consumption of culture by diverse audiences based on categories such as gender, age, race/ethnicity, religion, socioeconomic status, sexual orientation, etc. This course also strives to enhance both the cultural awareness and the visual appreciation required in the consumption of our modern media. Required for students majoring in-Mass Communications. Open to non-majors. This foundational class has no prerequisites. Three hours of lecture per week. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: None.	LEC	3	3
MASSCOMM	334	EDITING	Presents a general overview of basic knowledge and practical skills an editor should know. This includes editing for newspapers, magazines, newsletters, and on line content. This course builds upon MASSCOMM.230, which focuses on news writing. The course is an elective for students majoring in Mass Communications. This course is only open to majors. Three hours of lecture per week. Prerequisites: MASSCOMM.230.	LEC	3	3

MASSCOMM	336	DIGITAL VIDEO EDIT	Provides instruction in practices, theory and technology of video and audio editing. The aesthetics of editing will also be covered. The majority of our work will be non-linear, digital video editing. This course is an elective for students majoring in Mass Communications. The course is only open to majors. Three hours of lecture per week. May be offered in traditional and distance education formats. Prerequisite: MASSCOMM.271.	LEC	3	3
MASSCOMM	352	PUBLICITY & PR	Introduces the creation of research based, strategically driven public relations tactics used in various contemporary public relations efforts. Students will prepare written, spoken, visual and digital tactics. Three-hour combination of lectures and labs per week. May be offered in traditional and distance education formats. Prerequisites: MASSCOMM.251.	LEC	3	3
MASSCOMM	398	RESEARCH METHODS	Introduces students to designing and conducting research in the practice and study of mass communications and to writing an academic research paper. While emphasizing quantitative methods (e.g., surveys, experiments), qualitative methods (e.g., content analysis, interviewing, focus groups) will be discussed. Required for students majoring in Mass Communications. Three hours of lecture per week. May be offered in traditional and distance education formats. Prerequisites: Minimum 60 credits.	LEC	3	3
MASSCOMM	435	JOURNALISM WORKSHOP	Focuses on advanced writing/reporting skills that students can apply directly to any area of journalism. The area of study may include investigative reporting, data-driven journalism, and specialized reporting skills such as sports news writing and business news writing. This course also includes analyzing and evaluating journalism texts. This course is an elective for students majoring in Mass Communications. May be offered in traditional and distance education formats. Prerequisites: MASSCOMM.340. Three hours of lecture/lab per week.	LEC	3	3
MASSCOMM	455	PR: CASES & PROBLEMS	Analyzes public relations case studies examining the role of public relations professionals in social, economic and political contexts. Examines specific cases through a critical viewpoint to discern the effectiveness of particular campaigns. The role of the public relations professional in strategic planning and implementation of strategic communications programs will be addressed and reviewed. Three hours lecture per week. Prerequisites: MASSCOMM.352.	LEC	3	3
MASSCOMM	478	INDEPENDENT STUDY	Provides for individual work and study in an area of mass communications concentration. Students find a faculty sponsor/adviser and prepare a written proposal, which must have departmental approval and approval of the dean, College of Arts and Sciences.	IND	3	3
MASSCOMM	480	TELECOM WORKSHOP	Offers a practical workshop in which students focusing their studies on telecommunications undertake specific instruction on the technical and aesthetic aspects of their major. Topics may change from semester to semester and students may be required to work on specific projects, such as telethons or television news, as part of their workshop program. Workshops may be repeated provided topics change. This course is an elective for students majoring in Mass Communications. The course is only open to majors. Prerequisite: MASSCOMM.367. Three hours of lecture per week.	LEC	3	3

MASSCOMM	482	MASS COMM SEMINAR	Focusing predominantly on new and emerging subjects resulting from the pervasiveness of new media forms and technologies, this seminar course is largely designed to provide an outlet for faculty to cover the latest trends in media. Topics may change from semester to semester. Students may repeat seminars, subject to a change in topic and with the approvals of the instructor. This course is an elective for students majoring in Mass Communications. The course is only open to majors. Three hours of lecture per week. May be offered in traditional and distance education formats. Prerequisites: 60 or more credits or with the permission of the instructor.	SEM	3	3
MASSCOMM	497	INTERN IN COMMUNICAT	Studies a particular project, subject/topic or company arranged by the student, adviser and department chairperson. May be an on-campus or off-campus entity. Interns are expected to have completed the appropriate courses related to the internship prior to applying. Projects must be submitted in writing before the project is expected to begin and must be approved by the student's adviser and department chairperson. Special arrangements must be made for summer internships. Prerequisites: 60 credits and a GPA of 2.75 or with the permission of the department.	SUP	3	15
MASSCOMM	498	CAPSTONE	Focuses on developing necessary strategies that allow students to successfully obtain jobs in the mass communications industries or placement in graduate school. Integrates skills and working knowledge from all areas of the program for the purpose of developing a portfolio as well as job searching skills. This course is required for students majoring in Mass Communications. This course is open to majors only. This course may be offered in person, in a hybrid format or through distance education. Prerequisite: 90 credits completed, and all major requirements previously or concurrently taken. Three hours of seminar per week.	LEC	3	3
MATH	101	MATH THINKING	Presents mathematical topics and applications in a context designed to promote quantitative reasoning and the use of mathematics in solving problems and making decisions. Suitable for majors in humanities, education and others seeking a broad view of mathematics. No background in algebra required. This course earns three GEPs toward Goal 3 Analytical and Quantitative Skills in general education. This course is an approved Foundational Course. May be offered in traditional and distance education formats. Prerequisites: None. May be offered in traditional and distance education formats. Three hours of lecture per week.	LEC	3	3
MATH	109	COLLEGE ALGEBRA	Studies fundamental algebraic concepts and develops the mathematical and computation skills necessary to apply algebraic techniques to problems in business, economics, the social and natural sciences and the liberal arts. This course is an approved Foundational Course. Not open to students with a C- or higher recorded for MATH 113, MATH 123 or MATH 125. Prerequisite: ENRICH 90 Intermediate Algebra or Placement Test or SAT score high enough to place out of this requirement.	LEC	3	3
MATH	111	FINITE MATHEMATICS	Presents an introduction to logic, sets, counting techniques, probability, positional notation and non-decimal number systems. Students who have not had two years of high school algebra should take Math.109 College Algebra before taking Math.111. This course is required for students majoring in Computer Forensics. This course earns three GEPs toward Goal 3 Quantitative Reasoning in general education. This course is an approved Foundational Course. Prerequisites: None. Three hours lecture per week.	LEC	3	3
MATH	112	TRIGONOMETRY	Studies trigonometric functions and relations, exponential and logarithmic functions, circular functions and inverse functions and their applications. This course will introduce students to the basic concepts of trigonometry and its many related applications and provide a basis for future work in trigonometry encountered in calculus. This course is an approved Foundational Course. Prerequisites: MATH 109 College Algebra or a Math Placement Test Result of Pre-Calculus.	LEC	3	3

MATH	113	PRE CALCULUS	Studies elementary algebraic functions and relations, exponential and logarithmic functions, circular functions and inverse functions and their applications. Students learn the mathematical knowledge needed for the study of calculus and the related quantitative natural sciences. This course is an approved Foundational Course. Prerequisites: MATH.109 or Math Placement Test result of PreCalculus.	LEC	3	3
MATH	116	MATH FOR HEALTH SCI	Develops the mathematical and computational skills necessary to apply mathematical techniques to problems in the health sciences. Topics include fundamental concepts of algebra, geometry, probability and statistics, measurements, functions, exponential and logarithmic functions, systems of equations and data fitting. This course earns two GEPs toward Goal 3 Quantitative Reasoning in general education. This course is an approved Foundational Course. Prerequisites: Two years of high school algebra or the equivalent. Not open to students with credits for MATH.109, MATH.112, MATH.123, or MATH.125.	LEC	3	3
MATH	118	APPL MATRIX ALGEBRA	Introduces elementary matrix algebra and linear optimization methods for application primarily in business and social science. Includes graphical analysis of two-dimensional linear programming problems and formulation of linear models for various categories of multi-variable problems. Spreadsheet-based software is used in the solution and analysis of complex problems. Suitable for business majors and other students interested in applications of linear quantitative methods. Prerequisites: Two years of high school algebra or the equivalent. This course earns three GEPs toward Goal 3 Quantitative Reasoning in general education. This course is an approved Foundational Course. Three hours lecture per week.	LEC	3	3
MATH	123	ESSENTIALS CALCULUS	Presents the basic concepts of elementary calculus in a non-rigorous approach for students who are not mathematics majors. Pertinent topics in the real number system, analytic geometry, functions and limits prepare the student for the study of the basic techniques of applications of differentiation and integration. Course is not for chemistry, mathematics or physics majors. Students without sufficient algebra background should take MATH.109 prior to taking this course. This course earns three GEPs toward Goal 3 Analytical and Quantitative Skills in general education. This course is an approved Foundational Course. Three hours lecture per week. Prerequisite: MATH.109 College Algebra or a Math Placement Test Result of Precalculus. This course is not open to students who have earned a C- or better in MATH.125.	LEC	3	3
MATH	125	CALCULUS 1	Presents differentiation of algebraic and transcendental functions of a single variable, with applications, and the beginnings of integration. It is the first in the sequence of three calculus courses designed for students majoring in mathematics and other disciplines that require calculus. This course earns two GEPs toward Goal 3 Quantitative Reasoning and one GEP toward Goal 5 Natural Sciences in general education. This course is an approved Foundational Course. Prerequisite: Qualifying for Calculus on the University Placement Exam or MATH.113 or MATH.112. Three hours of lecture per week.	LEC	4	4
MATH	126	CALCULUS 2	Presents the integral calculus of functions of a single variable, sequences, series, and applications. It is the second in the sequence of three calculus courses designed for students majoring in mathematics and other disciplines that require calculus. This course earns three GEPs toward Goal 3 Quantitative Reasoning in general education. Prerequisites: MATH.125.	LEC	4	4
MATH	141	INTRO TO STATISTICS	Provides an introduction to descriptive and inferential statistics. Topics covered include numerical and graphical summary procedures, basic probability concepts, random variables and distributions, the Central Limit Theorem, confidence intervals, and hypothesis testing. Prerequisites: High School Algebra. This course earns three GEPs toward Goal 3 Quantitative Reasoning in general education and may be offered in traditional and distance education formats. This course is an approved Foundational Course. Three hours lecture per week.	LEC	3	3

MATH	185	DISCRETE MATHEMATICS	Presents an introduction to the language of mathematics and proof. Topics include symbolic logic, set theory, relations, functions, combinatorics, and mathematical induction. The course is intended for students majoring in mathematics or computer science and is not usually taken in the first semester of freshman year. Prerequisite: MATH.125. Three hour of lecture per week.	LEC	3	3
MATH	201	CONCEPT MATH 1 THEOR	Provides a survey of mathematics aimed at a developing skills in the use of numbers, number patterns and operations with numbers. Problem solving sets and number systems are emphasized. Other topics covered are set vocabulary, elementary number theory and historic number systems. Problem solving methods and manipulatives are used where appropriate. Calculator use is not permitted in this course. This course is an approved Foundational Course. This course earns three GEPs toward Goal 3 Quantitative Reasoning in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3
MATH	202	CONCEPT MATH 2 GE ST	Provides a survey of mathematics aimed at developing skills in the use of basic geometry, probability and statistics. Conceptual models and representations are used throughout the course. Calculator use is not permitted in this course. This course earns two GEPs toward Goal 3 Quantitative Reasoning in general education. Three hours lecture per week. Prerequisites: MATH.201.	LEC	3	3
MATH	217	HISTORY OF MATHEMATICS	Presents the development of some major mathematical achievements throughout history. The course addresses both how mathematics has been developed throughout history and under what conditions it was developed. It is designed for math and education majors but it is suitable for students in any major. This course earns one GEP toward Goal 1 Communication and one GEP toward Goal 2 Information Literacy in general education. Prerequisites: Calculus 2 and either Technical Writing or 24 total credits.	LEC	3	3
MATH	225	CALCULUS 3	Examines three dimensional analytic geometry and vectors, vector-valued functions, vector calculus, partial derivatives, multiple integrals, Green's theorem, Stokes' theorem and their applications. The course is designed for students majoring in mathematics and other disciplines that require calculus. The third in a three-semester calculus sequence, this course examines differentiation and integration of vector-valued functions and functions of several variables. Prerequisites: MATH.126.	LEC	4	4
MATH	226	CALCULUS 4	Presents an introduction to the differentiation and integration of real valued functions of several variables. Presents curves and parametric equations, surfaces, Taylor's, Stoke's and Green's theorems, functions between Euclidean spaces and multiple integrals. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisite: MATH.225.	LEC	3	3
MATH	240	STATISTICAL METHODS	Presents common statistical techniques with emphasis on applications. Topics include: confidence intervals, hypothesis test, regression analysis and analysis of variance. Strongly encourages use of statistical software, especially SAS. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisite: MATH.141 or MATH.241 or consent of the instructor.	LEC	3	3
MATH	241	PROB & STATISTICS	Calculus-based study of probability and statistics. Topics covered include: descriptive statistics, probability, discrete and continuous random variables, common distributions, sampling distributions, estimation procedures and inferential statistics. A more rigorous course than MATH.141. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisites: MATH.126 (or concurrent) and MATH.185.	LEC	3	3

MATH	303	PROB SOLVING TEACHER	Examines mathematical problem solving for elementary and middle school teachers. Basic problem solving, use of manipulatives and assessment are covered. This course requires off campus observations and teaching and is for Elementary Education and Secondary Education majors. Three hours of lecture per week. Prerequisite: MATH.201 and declared major in Education.	LEC	3	3
MATH	314	LINEAR ALGEBRA	Presents the theory and computational aspects of matrix operations, determinants, abstract vector spaces, linear transformations, eigenvalues and eigenvectors, and related topics. Applications of these concepts to modeling problems in science, business, and engineering may be considered. The course is intended for mathematics, computer science and science majors. Three hours of lecture per week. Prerequisites: MATH.185.	LEC	3	3
MATH	322	DIFF EQUATIONS	Studies elementary ordinary differential equations, power series solutions, some numerical methods of solution, Laplace transforms, and first-order systems of equations. Applications of these concepts in science and engineering will be considered. The course is intended for mathematics and science majors. Three hours of lecture per week. Prerequisite: MATH.126.	LEC	3	3
MATH	340	STATISTICAL SOFTWARE	Provides an introduction to the most widely-used statistical software packages in government and industry. Students gain practical experience by solving real-world statistical problems encountered by various government agencies and private companies. Graphical and numerical descriptive procedures and inferential statistical techniques will be discussed. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisite: MATH.240.	LEC	3	3
MATH	342	DES & ANALYSIS EXP	Basic experimental statistics including methods of estimation and hypothesis testing, analysis-of-variance procedures, principles of experimental design, completely randomized and randomized complete block designs, factorial arrangements of treatments, linear regression and correlation analysis, covariance analysis and distribution-free methods. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisite: MATH.141 or MATH.241 or consent of the instructor.	LEC	3	3
MATH	360	NUMBER THEORY	Presents the basics of elementary number theory. Topics include the Euclidean algorithm, divisibility, congruencies and modular arithmetic, primes, number-theoretic functions, and Diophantine equations. Emphasis is placed on making mathematical conjectures and verifying or disproving them, and on writing efficient and mathematically correct proofs. The course is intended for mathematics majors. Three hours of lecture per week. Prerequisites: MATH.185 and MATH.225.	LEC	3	3
MATH	361	CODING & SIGNAL PROC	Presents a mathematical approach to codes, ciphers and computer and network security. Course topics include security codes, coding for efficiency in computer storage, and error correcting codes. Students will be required to complete a project. Three hours lecture per week. Prerequisites: MATH.185.	LEC	3	3
MATH	410	MATH MODELING	Presents a synthesis of mathematical methods utilized to model and solve real-world problems. The emphasis is on developing models that provide the means to analyze and answer questions posed in practical settings. Students will learn a problem-solving approach toward applied problems in optimization, dynamical systems, and stochastic processes. The course is intended for mathematics majors. Three hours of lecture per week. Prerequisites: MATH 241 and COMPSCI 122 or COMPSCI 215 or MATH 320 or any course COMPSCI 300 or higher.	LEC	3	3

MATH	421	ADVANCED CALCULUS	Presents a rigorous treatment of the calculus of functions of a single real variable. The course is designed to fill the gaps left in the development of calculus as it is presented in the elementary courses. Topics include an introduction to the topology of the real line and the rigorous development of the concepts of limit, continuity, derivative, and integral. Three hours of lecture per week. Prerequisites: MATH.225 - Calculus 3 and MATH.185 - Discrete Math.	LEC	3	3
MATH	446	BIostatISTICS	An introduction to the concepts and methods of advanced statistics techniques that arise in health and life sciences with emphasis on problems that are likely to be encountered by graduate researchers in biological sciences. It includes methodologies for design and analysis of multivariate data. The use of statistical software to analyze data sets is stressed. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisites: MATH 141 - Intro to Statistics.	LEC	3	3
MATH	461	PROB MODELS & APPLIC	An introduction to the concepts and methods of probabilistic modeling for random trials and occurrences. It covers classical models, poisson processes, Markov chains, Renewal and Branching processes and their applications to various phenomena in engineering, management, physical and social sciences. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week. Prerequisite: MATH.241.	LEC	3	3
MATH	492	INDEPENDENT STUDY	Provides for directed study of a particular area of mathematics as mutually agreed upon by the student and the instructor. Emphasizes individual scholarly activity of the highly motivated student.	IND	1	3
MATH	493	HONORS IND STUDY	For students who have demonstrated a high level of interest and ability in mathematics and have mastered the required course work. Students investigate research problems selected under the supervision of a faculty member of the Department of Mathematics and Computer Science. Three hours of lecture per week. Prerequisite: Admission to the Honors Program in natural sciences and mathematics.	IND	3	3
MATH	546	BIostatISTICS	An introduction to the concepts and methods of advanced statistics techniques that arise in health and life sciences with emphasis on problems that are likely to be encountered by graduate researchers in biological sciences. It includes methodologies for design and analysis of multivariate data. The use of statistical software to analyze data sets is stressed. This course counts as a Group C, Natural Sciences & Math General Education Requirements. Three hours of lecture per week.	LEC	3	3
MEDTECH	401	CLIN MICROBIOLOGY	A lecture and laboratory study of bacteria, fungi, parasites and viruses which cause disease in humans, their clinical pathology and related diagnostic laboratory procedures.	LEC	6	10
MEDTECH	402	CLIN HEMAT/COAGUL	A lecture and laboratory study of hematopoiesis and blood coagulation. Students acquire an understanding of the theory of hematological tests, skills in the performance of these tests, knowledge of blood disorders and insight into the significance of test results.	LEC	6	10
MEDTECH	403	CLIN CHEM MED TECH	Lecture and laboratory study of enzymes, carbohydrates, lipids, proteins, nitrogenous end products, electrolytes, acid-base balance, body fluids, toxicology, endocrinology and urinalysis. Lecture series includes anatomy, physiology, methods of analysis and clinical significance of each biochemical determination. Laboratory study includes standardization and quality control of procedures using spectrophotometry, chromatography, electrophoresis and automated techniques.	LEC	6	10

MEDTECH	404	CLIN IMMUNOHEMATOLGY	Lecture and laboratory study of blood groups, genetics, antigens and antibodies and their interaction as related to safe transfusion, prediction of immune incompatibilities and probability of parentage. Donor collection, processing, blood component preparation and therapy also studied.	LEC	3	6
MEDTECH	405	CLIN IMMUN/SEROLOGY	Lecture and laboratory study of immunological concepts and theory and their relation to serologic reactions and clinical interpretations.	LEC	2	4
MEDTECH	406	CLINICAL SEMINAR	Covers courses not included above, such as orientation, laboratory management, education, clinical microscopy and/or areas unique to the individual hospital program. .	LEC	1	6
MGMT	244	PRINCIPLES OF MANGT	Focuses on the fundamentals of the practice of management, including administrative, organizational and behavioral theories. It explores the functions of management and the aspects of the organizational environment. Three lecture hours per week. May be offered in traditional and distance education formats. Prerequisites: 24 credits earned.	LEC	3	3
MGMT	345	HUMAN RESOURCE MGT	Develops the capacity to help an organization deal effectively with its people during the various phases of the employment process, from organizational entry to exit. Students learn how to properly perform HR tasks such as interview job applicants, provide and communicate job performance ratings, and carry out disciplinary procedures, all within the context of prevailing legal and ethical standards. May be offered in traditional and distance education formats. Three hours per week. Prerequisite: MGMT.244 and must have 50 credits earned.	LEC	3	3
MGMT	346	LABOR & INDUST RELAT	Develops knowledge of the relationship between management and labor in situations where the relationship is governed by a collective bargaining agreement and in those where it is not. Students learn about the development of unions in the United States and the legal obligations and best practices related to protected concerted activities, union organizing campaigns, contract negotiations, impasse resolutions, and grievance procedures. The future of unions in the United States and comparisons to other countries' industrial relations systems are also explored. This course is an elective option in the Management Program. Prerequisite: MGMT 244 - Principles of Management.	LEC	3	3
MGMT	391	SMALL BUS MANAGMT	Applies small business theory and practice in the U.S. business environment. Distinguishes types of small businesses and differentiates the advantages and disadvantages associated with each type. Presents a thorough treatment of the start-up and management of small firms including forms of ownership, financing, operations, accounting, human resources, location, franchising, inventory, marketing, regulation, and risk management. Course may be offered online or in the traditional class setting. Three lecture hours per week. Prerequisites: 60 credits, ACCT.220, ACCT.223, MGMT.244, FINANCE.313, MKTG.310 and LAW.331.	LEC	3	3
MGMT	432	INTERN IN MANAGEMENT	Integrates classroom experience and practical work experience in industrial, business or government work situations. Allows students to translate academic theories and principles into action, to test career interests and to develop skills and abilities through carefully planned and supervised problems related to the field of management. Prerequisites: MGMT.244 or approval of internship supervisor or department chairperson. GPA of 2.50, 75 semester hours and major or minor in business administration.	SUP	1	6

MGMT	443	MANAGERIAL DM	This course covers application of intermediate statistical techniques to typical managerial decision contexts. Students transform accurate, relevant, and timely data into valid and reliable information as a key first step in the decision analysis that precedes the basic management practice: allocation of constrained resources. Decision processes that support optimal choices are also presented. Content includes regression analysis, analysis of variance, decision trees, and forecasting. The course is software intensive; students develop extensive spreadsheet models. Three lecture hours per week. Prerequisites: MGMT.244 and ECONOMIC.256.	LEC	3	3
MGMT	445	MANAGERIAL COMMUNIC	Prepares students for effective managerial communication by providing preparation in the process and structure of communication in a professional setting. Three lecture hours per week. Prerequisites: BUSED.333, COMMSTUD.103, MGMT.244 and 60 credits earned.	LEC	3	3
MGMT	448	SUPPLY CHAIN OPS	This course introduces students to the scope of management activities inherent in operating organizations within global supply chain contexts. Students experience how business disciplines interact and contribute data and information, within and across organizations, to support decisions necessary for successful operation of organizations and their extended supply chains. Content includes process design and analysis, project management, supply chain strategy, inventory control capacity planning, and scheduling. The course is software-intensive; students develop spreadsheet models, utilize interactive simulations, and experience enterprise systems. May be offered in traditional and distance education formats. Three lecture hours per week. Prerequisites: ECONOMIC.256 and MGMT.244.	LEC	3	3
MGMT	449	ORGANIZAT BEHAVIOR	Discusses individual (personal/inter personal) behaviors in the organization. It also discusses group and team process, and behaviors. It studies theories and cases related to how the individual, team/group through interactions with organizational structure, processes, and leadership, do create the organizational culture and climate, and thus shape the behavior of the organization. This course is required for the Management Major and Minor. It is also suitable as an elective for undergraduate students in the College of Business. May be offered in traditional and distance education formats. Prerequisite: MGMT.244 and 60 credit hours.	LEC	3	3
MGMT	451	SUPPLY CHAIN SEMINAR	This course integrates the concepts, processes, and strategies of global supply chain management: the optimization of business processes from original suppliers through consumer end-users. It emphasizes managing trade-offs in procurement, inventory, and distribution activities, improving forecasts, and developing customer relationships. Students will track related transactions and concurrent cash flow implications using enterprise resource planning (ERP) software to create real-world experiences and demonstrate the value of interactive business information systems. Three hours lecture per week. Prerequisite: MGMT 448	LEC	3	3
MGMT	456	INTERNAT MANAGEMENT	Develops an understanding of the issues related to international business environment, refines this knowledge by the analysis of current economical, social and political issues that can influence international and global companies and prepares students to analyze international business issues as a manager of a multinational/global company. Three lecture hours per week. Prerequisite: MGMT.244 and junior standing. This course is approved as a Diversity General Education Course.	LEC	3	3
MGMT	457	BUSINESS & SOCIETY	Prepares students to manage social responsibility and ethics issues related to business operations and the interests of multiple stakeholders. This course is required for Management majors. It is also suitable as an elective for undergraduate students interested in business ethics and corporate social responsibility. Three lecture hours per week. May be offered in traditional and distance education formats. Prerequisites: MGMT.244 and 60 credits earned.	LEC	3	3

MGMT	463	EMPLOYEE STAFFING	Examines the procedures used by companies to recruit and hire employees. Students learn how organizations seek to improve effectiveness by ensuring each job is legally staffed by a fully capable individual. Topics covered include job analysis, employee recruitment, selection techniques, validation procedures and legal restraints on employee selection practices. Three lecture hours per week. Prerequisite: MGMT.345 - Human Resource Management and junior standing.	LEC	3	3
MGMT	481	BUSINESS POLICIES	Prepares students in the area of strategic decision-making for the total organization through strategic formulation and administration using integrative analysis and strategic planning and process. Three lecture hours per week. Prerequisites: 90 semester hours earned, MGMT.244, FINANCE.313, MKTG.310, LAW.331 and senior standing.	LEC	3	3
MGMT	498	SPECIAL TOPICS MGT	Examines current or advanced issues in the field of management not normally examined in depth in other courses. The topic will be determined by the instructor. Three lecture hours per week. Prerequisites: MGMT.244 - Principles of Management and the approval of the instructor.	LEC	3	3
MGMT	560	OPERATION MANAGEMENT	This 3-credit graduate course introduces students to the operational issues, opportunities, and problems in manufacturing and service industries in global supply chain contexts. Both quantitative and qualitative in nature, the content provides students a systematic and integrative approach to managing organizations, and exposes them to the true breadth and depth of decision issues and opportunities typical in modern organizations. With its dual focus on strategic and operating levels, this course integrates quantitative models including forecasting, location, project management, and inventory management with broad-based managerial issues such as strategic planning, product and industry life cycles, supply chain management, and enterprise systems planning. May be offered in traditional and distance education formats. Prerequisites: MGMT.511.	LEC	3	3
MGMT	567	MANAGING PEOPLE	Develops the skills essential for effective interpersonal management in a modern organization. It provides an integrated, comprehensive learning model designed to modify current behavior and provide a foundation for changing behavior in the future. Students enhance their abilities in supportive communication, motivating employees, gaining power and influence, developing and managing work teams, creating a motivational environment, and facilitating change. May be offered in traditional and distance education formats. Three hours per week. Prerequisites: Graduate Standing.	LEC	3	3
MGMT	576	GLOBAL BUSINESS	Enhances the ability to successfully operate in the environment of global business. Covers the different major economies and their interdependence, cultures, trade and investment activities, and relevant international organizations. In addition, the course focuses on the operational choices of global companies and their methods of entry into global markets, global market structures, global supply chain management, and global brands. Further, foreign societal, ethical and legal issues and ways to respond are addressed. May be offered in traditional and distance education formats. Three hours per week. Prerequisites: Graduate Standing.	LEC	3	3
MGMT	590	INTERNSHIP IN MANAGEMENT	Prepares students to apply business skills and knowledge through an experiential learning experience in an organizational setting. Integrates principles, theories and practices obtained in the MBA in a real world employment situation as a capstone educational experience. Prerequisites: Graduate status; 24 credits earned or permission of instructor & appropriate graduate coordinator.	LEC	3	3

MGMT	592	MBA PRACTICUM	Creates an applied learning experience that integrates and expands upon the knowledge learned in the MBA program. This core course serves as a capstone learning experience and will include either a consultancy in a dynamic business environment, or an applied business report within a corporation or other economic entity. Students are responsible for a written proposal, a final written report of professional quality, and an oral presentation to graduate faculty and relevant stakeholders in the community. Graduate students must begin the practicum process during the semester before they graduate and it must be successfully completed in order to graduate. Prerequisites: 21 graduate credits and permission of instructor/MBA coordinator.	LEC	3	3
MKTG	310	MARKETNG PRIN & PRAC	Surveys the fundamental features of contemporary marketing systems and the planning required to make available satisfying goods and services to customers at a profit. Explains the role of marketing in society and the institutions which compose the market system. Describes components of the marketing mix-product planning, distribution, pricing and promotion. Three lecture hours per week. May be offered in traditional and distance education formats. Prerequisite: ECONOMIC.121 and ECONOMIC.122.	LEC	3	3
MKTG	330	CONSUMER MOTIV & BEH	Analyzes the role of the consumer as the ultimate buyer of the product and the strategy and forces directed at the consumer by the seller. Topics include models of consumer buying behavior, consumer motivation, interpersonal and intrapersonal influence on the consumer as a decision maker in the market place. This course may be offered in traditional and distance education formats. Three lecture hours per week. Prerequisites: MKTG.310 and PSYCH.101.	LEC	3	3
MKTG	331	E-MARKETING	Introduces students to the fundamentals of digital marketing and its application within online and mobile environments. Special emphasis will be placed on how digital marketing has disrupted the traditional marketing landscape and its influence on the sales funnel, creating customer personas, customer and brand relationships, consumer value and bonding, the importance of content development, native advertising among digital platforms, and the impact of analytics in decision-making. This course will equip students with the skills and tools necessary for developing and implementing successful strategic digital marketing outcomes. This course is intended for marketing students or as an elective for students in other business or academic disciplines. Prerequisite: MKTG 310 - Marketing Principles and Practices.	LEC	3	3
MKTG	340	ADVERTISING MANAGMT	Provides students with a foundation in the development and execution of communications strategies for any organization. Primary emphasis is placed on consumer insight, branding, market segmentation and positioning, message strategy, promotion and the execution of marketing communications through appropriate media technologies. Students will develop an understanding of marketing communications practice through readings, lectures, case analysis and discussions and will demonstrate effective decision-making in ambiguous marketing environments, using financial and market analysis, and considering legal and ethical concerns. The course develops students' ability to think analytically and strategically by assessing examples and case studies of marketing communications problems and opportunities. This course may be offered in traditional and distance education formats. Prerequisite: MKTG.310.	LEC	3	3
MKTG	341	PRIN OF SELLING	Analyzes selling as a profession, includes preparation for successful selling, steps and procedures associated with the sales process, and special selling topics. Students apply sales principles and techniques while conducting sales presentations. Three lecture hours per week. Prerequisite: MKTG.310.	LEC	3	3

MKTG	350	RETAIL MGT CONCEPTS	Presents retailing and retail management from a holistic, omnichannel perspective. The course is designed to embrace the evolution of retailing by understanding the impact technology has on retailers and consumers. The traditional retail environment will be discussed as well as retailing in the digital age. The course will cover elements of the channels distribution system, consumer/marketing analysis, store location, store layout, merchandising, pricing, service levels, and promotional issues using an omnichannel business model. This course may be offered in traditional and distance education formats. Prerequisites: MKTG.310.	LEC	3	3
MKTG	370	SALES MANAGEMENT	Examines the personal selling element of the marketing/promotional program from a management perspective. Recruiting, selecting, training, organizing motivating, compensating, evaluating and controlling the sales force are treated as well as management's planning responsibilities which include designing intelligence systems, forecasting and establishing sales territories. Special consideration is given to sales management's inputs and integration with marketing management. Prerequisite: MKTG 310	LEC	3	3
MKTG	380	INTERNATIONAL MARKET	Examines the universality of the marketing discipline throughout diverse global economies. Conducts cross cultural analyses to understand cultural universals and the economic integration of regional alliances, such as the European Union. Assesses various entry strategies such as exporting, joint ventures, direct investment and turn key operations. Highlights the corporate role of global strategic partnerships in producing a higher standard of living. Three lecture hours per week. Prerequisite: MKTG.310. May be offered in traditional and distance education formats.	LEC	3	3
MKTG	432	INTERN IN MARKETING	Develops applied marketing skills in an experiential setting that are not available in the academic classroom. Students learn to relate marketing principles and practices to an employment situation. Prerequisites: MKTG.310, 2.5 GPA, 80 semester hours and junior or senior standing.	SUP	1	6
MKTG	440	MARKETING RESEARCH	Develops the skills of the scientific marketing research procedure (problem definition, research design, data collection, analysis and interpretation). Applies research data collection methods and statistical analysis to product mix issues such as planning, advertising research, consumer or competitive analysis. Three lecture hours per week. Prerequisites: ECONOMIC 256 - Bus & Economics Statistics I or PSYCH 160 - Applied Statistics for the Behavioral Sciences.	LEC	3	3
MKTG	460	MARKETING MANAGEMENT	Takes a holistic approach to marketing management by integrating theoretical marketing perspectives into system models. Course analyses apply problem solving skills to strategic and theoretical issues in marketing systems such as products, services, pricing, places, ideas, and organizations. Marketing concepts are integrated with advanced sciences such as economics, behavioral sciences, management, and mathematics. Three lecture hours per week. May be offered in traditional and distance education formats. Prerequisite: MKTG.310, MKTG.330 plus six additional credits in Marketing.	LEC	3	3
MUSIC	100	RECITAL ATTENDANCE	Documents recital attendance requirement for all tracks of the Bachelor of Arts in Music. May be repeated at zero credit each semester.	LAB	0	0
MUSIC	101	MUSIC LISTENING	Provides an approach to music listening through study of basic vocal and instrumental styles from Ancient Greece and the Middle Ages through the current day, with analysis of various masterpieces, composers and musical forms. Requires no previous musical experience. This is a recommended first course in non-applied music. This course earns three GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: None.	LEC	3	3

MUSIC	102	WORLD MUSIC	Explores the musical traditions and historical relevance of several different cultures from around the world, including India, Africa, Ireland, Japan, Bali, Latin America, China, and Native America. Through the use of a selected text, website references, and a series of selected listening examples; the student's knowledge of these musical cultures will be broadened. There will also be a "hands-on" aspect of the course where the students will be able to experience some of the musical styles through performance. Requires no previous musical experience. Offered Fall and Spring semesters. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Three hours lecture per week. Prerequisite: None.	LEC	3	3
MUSIC	103	FUND MUSICIANSHIP	Explores personal music understanding and development through elementary terminology, symbols, theory, music reading, singing, and playing and chording of simple instruments. Suggested for students with little musical background as preparation for applied. This course counts as a Group A, Humanities and The Arts General Education Requirements.	LEC	3	3
MUSIC	106	MAROON & GOLD BAND	Performs music of varied styles and periods. Marching band each fall, concert band each spring. Requires 5 hours per week each fall and 4 hours per week each spring.	ACT	0	1
MUSIC	107	UNIV COMM ORCHESTRA	Performs music appropriate to the symphony orchestra. Requires 3 hours per week. Rehearses Monday evenings. Election for wind and percussion players requires permission of the instructor. Prerequisites: By audition only.	ACT	0	1
MUSIC	108	CONCERT CHOIR	Performs choral music of varied styles and periods. Membership by audition only. Requires 4 hours per week.	ACT	0	1
MUSIC	109	WOMENS CHORAL	Performs varied styles from popular to masterworks. Requires 3 hours per week. No audition required.	ACT	0	1
MUSIC	110	HUSKY SINGERS	Performs varied music for men's chorus. Requires 2 hours per week. No audition required.	ACT	0	1
MUSIC	112	JAZZ ENSEMBLE		ACT	0	1
MUSIC	170	UNIV CHAMBER ORCH	The University Chamber Orchestra performs music appropriate to the chamber orchestra. Requires 2 hours per week. Rehearses Monday evening and one 50-minute class period. Election for wind and percussion players requires permission of the instructor. Prerequisites: By audition only.	ACT	0	1
MUSIC	172	GITAR ENSEMBLE	Provides its memebers with the skills needed to perform music of varied styles and periods written or transcribed for guitar ensemble. Three hours per week for zero-1 credit. May be repeated. Prerequisites: By audition only.	LEC	0	1
MUSIC	173	PERCUSSION ENSEMBLE	Provides its members with the skills needed to perform a variety of percussion instruments in a small and large ensemble setting. Meets for 3 hours per week for zero-one credit. May be repeated. Prerequisites: By audition only.	ACT	0	1
MUSIC	204	CLASS PIANO 1	Provides group piano instruction for the beginner. Emphasizes solo playing, sight-reading and creative accompaniment. Requires 2 hours per week. Limited seating.	LEC	2	2
MUSIC	205	CLASS PIANO 2	Develops independence in solo playing and accompanying. Continuation of MUSIC.204 or students with demonstrated abilities. Requires 2 hours per week. Consent of instructor.	LEC	2	2

MUSIC	207	BRASS METHODS 1	Instruction on teaching trumpet and horn to music students in elementary and secondary schools, through performance on the instruments and study of pedagogical methods. Requires two hours per week. Prerequisite: music major or permission of instructor.	LAB	1	1
MUSIC	208	BRASS METHODS 2	Brass Methods II is designed to prepare the student to teach trombone, euphonium and tuba to music students in elementary and secondary schools, through performance on the instruments and study of pedagogical methods. Music majors or permission of the instructor.	LAB	1	1
MUSIC	213	VIOLIN	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at one semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	214	VIOLA	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at one semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	215	VIOLONCELLO	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	216	DOUBLE BASS	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	230	VOICE	Private instruction for students with demonstrated vocal abilities. One-half hour per week. May be repeated at 1 semester hour each election. Prerequisite: MUSIC.203 except music majors and declared music minors. Consent of instructor.	TUT	1	1
MUSIC	234	GUITAR	One half hour guitar lesson and weekly one hour performance lab for students with demonstrated ability or potential. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	235	PIANO	Private instruction for students with previous piano study. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	240	TRUMPET	Private instructions for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	241	HORN		TUT	1	1
MUSIC	242	TROMBONE		TUT	1	1
MUSIC	243	BARITONE		TUT	1	1
MUSIC	244	TUBA	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	251	FLUTE		TUT	1	1
MUSIC	252	OBOE	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1

MUSIC	253	CLARINET	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	254	BASSOON	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	255	SAXOPHONE	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	256	PERCUSSION	Private instruction with snare, timpani and mallets for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	259	AURAL SKILLS II	Focuses on aural recognition and performance of complex rhythms and chromatic melodies, recognition of harmonic progressions, improvement of sight-singing skills, and some melodic and harmonic keyboard facility. Second aural skills course in a sequence specifically designed for music majors and minors. Meets for 3 hours per week. Prerequisites: MUSIC.249 Aural Skills I (with a minimum grade of C), or permission of the instructor and to be taken concurrently with MUSIC.260 Chromatic Harmony. Offered in the Spring semester.	LAB	2	2
MUSIC	260	CHROMATIC HARMONY	Continues an exploration of basic theoretical understanding while exploring chromatic elements in music theory and incorporating analysis of formal structures of music. This course is designed for music majors and minors as the second music theory course in the theory sequence. Prerequisites: MUSIC.250 and to be offered concurrently with MUSIC.259 (with a minimum grade of C or higher) or permission of instructor. This course is offered in the spring semester.	LEC	3	3
MUSIC	269	GUITAR MUSIC MAJOR	One hour guitar lesson and weekly one hour performance lab for students electing the specializations within the BA in Music that require an hour lesson. May be repeated at 2 semester hours each election for a maximum of 16 semester hours. Consent of instructor.	TUT	2	2
MUSIC	270	VIOLIN MUS MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	271	VIOLA MUS MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	272	VIOLONCELLO MUS MAJ	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	273	DOUBLE BASS MUS MAJ	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	275	VOICE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied voice specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	276	PIANO MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2

MUSIC	277	TRUMPET MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	278	HORN MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	279	TROMBONE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	280	BARITONE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	281	TUBA MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	282	FLUTE MUSIC MAJOR	Two weekly half-hour lessons for students electing applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	283	OBOE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	284	CLARINET MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	285	BASSOON MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	286	SAXOPHONE MUS MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	300	THEORY 3	Form and Analysis. Continuation of music theory. Includes formal analysis, design, original composition, harmonic dictation and perception skills. Requires 3 hours per week. Prerequisite: MUSIC.211.	LEC	3	3
MUSIC	301	THEORY 4	Continuation of music theory. Reviews 20th century compositional practice. Includes analysis and composition in melodic and harmonic idioms. Requires 3 hours per week. Prerequisite: MUSIC.211.	LEC	3	3
MUSIC	302	KEYBOARD SKILLS 2	Provides opportunity for majors in music to gain proficiency at the keyboard. May be repeated. Prerequisite: Keyboard Skills I or permission of the instructor.	TUT	2	2
MUSIC	305	SP TOPICS MUSIC EDUC	Provides a study of music beyond currently available course topics. Instructor develops a one-time-only study. Information is available by contacting the Department of Music. Offered as needed.	LEC	1	1
MUSIC	306	MAROON & GOLD BAND	Performs music of varied styles and periods. Marching band each fall, concert band each spring. Requires 5 hours per week each fall and 4 hours per week each spring.	ACT	0	1

MUSIC	307	UNIV COMM ORCHESTRA	Performs music appropriate to the symphony orchestra. Requires 3 hours per week. Rehearses Monday evenings. Election for wind and percussion players requires permission of the instructor. Prerequisites: By audition only.	ACT	0	1
MUSIC	308	CONCERT CHOIR	Performs choral music of varied styles and periods. Membership by audition only. Requires 4 hours per week.	ACT	0	1
MUSIC	309	WOMENS CHORAL	Performs varied styles from popular to masterworks. Requires 3 hours per week. No audition required.	ACT	0	1
MUSIC	310	HUSKY SINGERS	Performs varied music for men's chorus. Requires 2 hours per week. No audition required.	ACT	0	1
MUSIC	312	JAZZ ENSEMBLE	Performs jazz, swing and other forms representing the big band style. Requires 3 hours per week. Election requires permission of the instructor. Audition may be necessary.	ACT	0	1
MUSIC	313	VIOLIN	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at one semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	314	VIOLA	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at one semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	315	VIOLONCELLO	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	316	DOUBLE BASS	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	322	MUSIC HIST 1750-PRES	Provides an overview of music history from the Classical era to the present time. Includes discussion of composers and significant persons, works and development of forms and genres during this period. Prerequisite 35.105 or consent of instructor.	LEC	3	3
MUSIC	328	CHORAL CONDOC & METH	Examines the development of techniques and abilities for participating in and supervising choral ensembles. Stresses tone production, proper breathing, choral conducting and reading of appropriate literature. Prerequisite: Music major or permission of instructor.	LAB	2	2
MUSIC	330	VOICE		TUT	1	1
MUSIC	331	ELEM METH CURR MUSIC	This course will provide the knowledge and skills necessary to teach music successfully in elementary schools. Education theories must be applied in practical situations such as the creation of lesson plans and the teaching of those lesson plans. Familiarity with computer assisted music software, familiarity with the legal aspects of teaching music in elementary schools, and required elementary school observations will be included. Observations in elementary schools required.	LEC	3	3
MUSIC	332	AUDIO RECORDING 2	This course will build upon the knowledge gained in Basic Audio Recording and will delve more deeply into computer-based hard disk recording using industry standard software: Sonar, Sound Forge, Cakewalk and Pro Tools. It will also explore sound design for the Internet and web pages. Prerequisite: Basic Audio Recording.	LEC	3	3

MUSIC	333	AUDIO RECORDING LAB	This course will allow music majors in the audio recording track to work on individual projects as directed by the professor. The projects will be targeted to build upon skills learned in 35.219 Basic Audio Recording, as well as new concepts and allow the students to build a portfolio of their work as an aide to future employment in the field. Prerequisite: Basic Audio Recording	LAB	1	1
MUSIC	334	GUITAR	One half hour guitar lesson and weekly one hour performance lab for students with demonstrated ability or potential. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	335	PIANO	Private instruction for students with previous piano study. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	340	TRUMPET	Private instructions for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	341	HORN		TUT	1	1
MUSIC	342	TROMBONE	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	343	BARITONE	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	344	TUBA	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	349	APP MUSIC COMPOSITION	Provides private instruction in music composition. For students with demonstrated ability for potential. One half hour per week. This course may be repeated for credit. Prerequisites: 35.210, 35.211 and the consent of instructor required.	TUT	1	1
MUSIC	351	FLUTE	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	352	OBOE	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	353	CLARINET	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	354	BASSOON	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	355	SAXOPHONE	Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1
MUSIC	356	PERCUSSION	Private instruction with snare, timpani and mallets for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. Consent of instructor.	TUT	1	1

MUSIC	360	MIDI/ELECTRONIC MUSI	Explores the history and evolution of Musical Instrument Digital Interface (MIDI) systems and applications. The history of electronic music production and various types of synthesis including FM, LA, additive, and subtractive will also be studied. Students will produce multiple MIDI projects as the semester progresses. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: 35.332.	LEC	3	3
MUSIC	370	UNIV CHAMBER ORCH	The University Chamber Orchestra performs music appropriate to the chamber orchestra. Requires 2 hours per week. Rehearses Monday evening and one 50-minute class period. Election for wind and percussion players requires permission of the instructor. Prerequisites: By audition only.	ACT	0	1
MUSIC	372	GITAR ENSEMBLE	Provides its memebers with the skills needed to perform music of varied styles and periods written or transcribed for guitar ensemble. Three hours per week for zero-1 credit. May be repeated. Prerequisites: By audition only.	ACT	0	1
MUSIC	373	PERCUSSION ENSEMBLE	Provides its members with the skills needed to perform a variety of percussion instruments in a small and large ensemble setting. Meets for 3 hours per week for zero-one credit. May be repeated. Prerequisites: By audition only.	ACT	0	1
MUSIC	390	MODERN HARMONY	Explores music of the 20th and 21st centuries while continuing study of formal structures in music. This course is designed for music majors as the fourth music theory course in the music theory sequence. Prerequisite: C or higher in Music 380: Advanced Harmony, or permission of instructor. This course is offered in the spring semester.	LEC	3	3
MUSIC	425	AUDIO RECORDING IV	Introduces the techniques involved in live sound reinforcement and recording. Very different from the controlled environment of the recording studio, live sound recording and reinforcement offers unique challenges to the audio engineer. This is a lab course, which meets for three hours per week. Prerequisites: 35.332.	LEC	2	2
MUSIC	469	GITAR MUSIC MAJOR	One hour guitar lesson and weekly one hour performance lab for students electing the specializations within the BA in Music that require an hour lesson. May be repeated at 2 semester hours each election for a maximum of 16 semester hours. Consent of instructor.	TUT	2	2
MUSIC	470	VIOLIN MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	471	VIOLA MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	472	VIOLONCELLO MUS MAJ	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	473	DOUBLE BASS MUS MAJ	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	475	VOICE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied voice specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2

MUSIC	476	PIANO MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	477	TRUMPET MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	478	HORN MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	479	TROMBONE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	480	BARITONE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	481	TUBA MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	482	FLUTE MUSIC MAJOR	Two weekly half-hour lessons for students electing applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	483	OBOE MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	484	CLARINET MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	485	BASSOON MUSIC MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	486	SAXOPHONE MUS MAJOR	Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.	TUT	2	2
MUSIC	487	PERCUSSION MUSIC MAJ	One hour percussion lesson and weekly one hour performance lab for students electing the specializations within the BA in Music that require an hour lesson. May be repeated at two semester hours each election for maximum of 16 semester hours. Prerequisites: For music majors or permission of instructor.	TUT	2	2
MUSIC	495	TCH MUSIC ED EXP 1	Provides opportunities for direct participation in teaching. Places students in classrooms with public or private school teachers. The student's main interest determines the assignment: one experience is wholly with the student's main interest in music, one experience is divided in half to cover the remaining requirements. The total experiences must include elementary, middle, and high school experience. The total experiences must also include general music, choral and instrumental teaching. Prerequisite: All other required music education courses.	FLD	6	6

MUSIC	496	TCH MUSIC ED EXP 2	Provides opportunities for direct participation in teaching. Places students in classrooms with public or private school teachers. The student's main interest determines the assignment: one experience is wholly with the student's main interest in music, one experience is divided in half to cover the remaining requirements. The total experiences must include elementary, middle, and high school experience. The total experiences must also include general music, choral and instrumental teaching. Prerequisite: All other required music education courses.	FLD	6	6
MUSIC	507	UNIV COMM ORCHESTRA		ACT	0	1
NATSCI	498	INTERN N SCI & MATH	Internship provides on-site work experience and training program to give selected intern an opportunity to apply the theoretical and descriptive knowledge acquired in multiple natural sciences and mathematics disciplines. Requires approval of the internship coordinator and the dean of Science and Technology.	SUP	1	9
NURSING	100	PERS HLTH: PER PERS	Provides students with information and tools to maintain and improve their personal health through accountability for health behaviors and decision making. Major themes include exploration of: many dimensions of health; factors impacting the health and wellness of individuals; individual behaviors which promote change and improved health for self and others and; current health issues for individuals and society. This course is intended for students of all disciplines. May be offered in traditional and distance education formats. This course earns two GEPs toward Goal 9 Healthy Living and one GEP toward Goal 10 Citizenship in general education. Three (3) hours of lecture per week. Prerequisites: None.	LEC	3	3
NURSING	211	NUTRITION	Introduces the student to the basic principles of the science and fundamentals of human nutrition and ways in which nurses can apply these scientific principles to promote an optimal level of health and wellness across the lifespan. The interrelationships among nutrition, food, and the environment as they impact health status are discussed with an emphasis placed on the multiple factors that influence food intake. Diet therapy and dietary modifications to treat chronic disease is integrated throughout the course. May be offered in traditional and distance education formats. Three (3) hours of lecture/discussion per week. Prerequisites: BIOLOGY.173, BIOLOGY.174, CHEM.101, and CHEM.108.	LEC	3	3
NURSING	212	PHARMACOLOGY	This course provides a foundation in pharmacology for pharmacologic content integrated throughout the curriculum. Historic, legal, ethical, social and political dimensions of pharmacotherapeutics are explored. Prerequisites: BIOLOGY.173, BIOLOGY.174, BIOLOGY.240 or BIOLOGY.242 (transfer course only), NURSING.210, NURSING.214 and NURSING.215. Concurrent with NURSING.213.	LEC	3	3
NURSING	213	FOUND NURS PRACTICE	Focuses on the application of nursing process to promote optimal levels of functioning of the adult and older adult. Students apply theory to the care of the individual client as they begin to assume the nursing roles of practitioner, teacher, leader/manager and consumer of research. Students expand their knowledge and application of major nursing concepts as they provide health care to clients in non life-threatening situations. Laboratory simulations and computer instruction enable the student to develop psychomotor skills basic to nursing practice. Instructional strategies include clinical experiences with clients in community and hospital settings. Three hours of class and 6 hours of clinical per week. Prerequisites: NURSING.210, NURSING.214, NURSING.215 and BIOLOGY.240 or BIOLOGY.242 (transfer course only). Concurrent with NURSING.211 and NURSING.212.	CLN	5	5

NURSING	213	FOUND NURS PRACTICE	Focuses on the application of nursing process to promote optimal levels of functioning of the adult and older adult. Students apply theory to the care of the individual client as they begin to assume the nursing roles of practitioner, teacher, leader/manager and consumer of research. Students expand their knowledge and application of major nursing concepts as they provide health care to clients in non life-threatening situations. Laboratory simulations and computer instruction enable the student to develop psychomotor skills basic to nursing practice. Instructional strategies include clinical experiences with clients in community and hospital settings. Three hours of class and 6 hours of clinical per week. Prerequisites: NURSING.210, NURSING.214, NURSING.215 and BIOLOGY.240 or BIOLOGY.242 (transfer course only). Concurrent with NURSING.211 and NURSING.212.	LEC	5	5
NURSING	217	ALCOHOL: USE & ABUSE	Provides a comprehensive overview of alcohol: its use and abuse. The nature of alcohol problems, causes and consequences of alcohol use, abuse and dependence in terms of epidemiological, physical, gender, psychological, sociological, treatment, and public policy perspectives are discussed. Controversial issues and myths regarding alcohol consumption are critically analyzed from health, ethical, moral, spiritual, sociocultural, legal and political frameworks. Opportunities for reflection on and examination of personal belief system about alcohol use within the context of personal and social responsibility are provided. Because alcohol abuse and dependence are leading public health and legal problems in the U.S., this course is intended for students in all disciplines. This course earns two GEPs toward Goal 9 Healthy Living and one GEP toward Goal 10 Citizenship in general education. Three (3) hours of lecture per week. May be offered in traditional or distance education formats. Prerequisites: None.	LEC	3	3
NURSING	240	CONTEMP WOMEN'S HLTH	Focuses on women's health across the lifespan that considers the impact of culture and diversity. Students will examine health issues as they relate to women across ethnic, racial, religious and geographical boundaries. The content will contain an overview of physiologic changes, self-care issues, personal enrichment, relationships with partners, sexual health and fertility, childbearing, routine examinations and procedures. The course is designed for students interested in health, women's studies, or those desiring personal enrichment and an understanding of contemporary women's health concerns. This course earns two GEPs toward Goal 4 Cultures and Diversity and one GEP toward Goal 10 Citizenship in general education. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: None.	LEC	3	3
NURSING	306	INTRO NURS RESEARCH	Introduces students to the concepts, skills, processes, and role of research in nursing and evidence-based practice in order to facilitate their development as consumers of research and in cultivating a spirit of inquiry in clinical practice. Major emphases are placed on the contribution of research and evidence to the discipline and to the students' role in critically appraising evidence on which to base clinical decisions. May be offered in traditional and distance education formats. Prerequisites: A Basic Statistics Course.	LEC	3	3
NURSING	311	ADULT HEALTH 1	Focuses on the application of the nursing process to promote and restore the health of older adults with chronic or potentially life threatening illnesses. Students apply developmental theory related to the older adult while providing health care. Increasing independence in nursing roles occurs as students collaborate with health care providers in a variety of settings. Three hours theory and 14 hours clinical per week. Prerequisites: BIO 240, NURSING 210, NURSING 211, NURSING 212, NURSING 213, NURSING 214 and NURSING 215	CLN	7	7

NURSING	311	ADULT HEALTH 1	Focuses on the application of the nursing process to promote and restore the health of older adults with chronic or potentially life threatening illnesses. Students apply developmental theory related to the older adult while providing health care. Increasing independence in nursing roles occurs as students collaborate with health care providers in a variety of settings. Three hours theory and 14 hours clinical per week. Prerequisites: BIO 240, NURSING 210, NURSING 211, NURSING 212, NURSING 213, NURSING 214 and NURSING 215	LEC	7	7
NURSING	312	MATN/CHLD HLTH NUR 3	Focuses on family-centered nursing and application of diverse theories, concepts and principles synthesized from the arts, sciences and humanities to the professional practice of maternal and child health nursing. Students use critical thinking, effective communication skills, information and technology and assessment findings to provide safe, evidence-based nursing care to women, neonates, children, and their families in community and hospital based settings. Students incorporate professional values, and behaviors as they collaborate with a variety of health care providers. Prerequisites: Sophomore level nursing courses: NURSING.210, NURSING.211, NURSING.212, NURSING.213, NURSING.214, NURSING.215.	CLN	8	8
NURSING	312	MATN/CHLD HLTH NUR 3	Focuses on family-centered nursing and application of diverse theories, concepts and principles synthesized from the arts, sciences and humanities to the professional practice of maternal and child health nursing. Students use critical thinking, effective communication skills, information and technology and assessment findings to provide safe, evidence-based nursing care to women, neonates, children, and their families in community and hospital based settings. Students incorporate professional values, and behaviors as they collaborate with a variety of health care providers. Prerequisites: Sophomore level nursing courses: NURSING.210, NURSING.211, NURSING.212, NURSING.213, NURSING.214, NURSING.215.	LEC	8	8
NURSING	410	PUBLIC HLTH NURSING	Focuses on the use of demography, biostatistics, epidemiology, and population assessment to promote the health of individuals, aggregates, and populations. Participation in aggregate and population-focused activities such as assessment, planning, and implementation is cultivated. Collaboration with others to implement evidenced-base strategies for clinical prevention of illness, injury, disability, and premature death is advanced. Role development will be fostered through independent and interdependent activities with groups and organizations providing care with attention to health disparity, vulnerability, and culturally diverse populations. May be offered in traditional and distance education formats. This course earns two GEPs toward Goal 4 Cultures and Diversity and two GEPs toward Goal 10 Citizenship in general education. Prerequisites: NURSING.306, NURSING.311, NURSING.312, NURSING.314; NURSING.305 and NURSING.306 for RNs.	CLN	5	5
NURSING	410	PUBLIC HLTH NURSING	Focuses on the use of demography, biostatistics, epidemiology, and population assessment to promote the health of individuals, aggregates, and populations. Participation in aggregate and population-focused activities such as assessment, planning, and implementation is cultivated. Collaboration with others to implement evidenced-base strategies for clinical prevention of illness, injury, disability, and premature death is advanced. Role development will be fostered through independent and interdependent activities with groups and organizations providing care with attention to health disparity, vulnerability, and culturally diverse populations. May be offered in traditional and distance education formats. This course earns two GEPs toward Goal 4 Cultures and Diversity and two GEPs toward Goal 10 Citizenship in general education. Prerequisites: NURSING.306, NURSING.311, NURSING.312, NURSING.314; NURSING.305 and NURSING.306 for RNs.	LEC	5	5

NURSING	411	PSYCH/MENT HLTH NURS	Focuses on the application of diverse theories, concepts and principles synthesized from the arts, sciences and humanities to the professional practice of psychiatric-mental health nursing. Students use critical thinking, effective communication skills, information and technology, and assessment findings to diagnose, plan, deliver and evaluate quality patient-centered care. Students incorporate professional values and behaviors as they employ a "therapeutic use of self" and function in collaborative roles with clients, support systems, and other providers to deliver holistic, safe, evidence-based care within a diverse, global society. Three hours theory and eight hours clinical per week. Prerequisites: NURSING.306, NURSING.311, NURSING.312 and NURSING.314.	CLN	5	5
NURSING	411	PSYCH/MENT HLTH NURS	Focuses on the application of diverse theories, concepts and principles synthesized from the arts, sciences and humanities to the professional practice of psychiatric-mental health nursing. Students use critical thinking, effective communication skills, information and technology, and assessment findings to diagnose, plan, deliver and evaluate quality patient-centered care. Students incorporate professional values and behaviors as they employ a "therapeutic use of self" and function in collaborative roles with clients, support systems, and other providers to deliver holistic, safe, evidence-based care within a diverse, global society. Three hours theory and eight hours clinical per week. Prerequisites: NURSING.306, NURSING.311, NURSING.312 and NURSING.314.	LEC	5	5
NURSING	412	ADULT HEALTH NURSE 2	Focuses on providing care for adult clients with complex needs. Students employ critical thinking to problem-solving and make decisions. Student use nursing process, therapeutic skills and technology in assisting these clients to attain an optimal level of functioning. They collaborate with clients and the interdisciplinary team to promote, maintain and restore optimal health to a variety of clients. Learning experiences provide opportunities for students to develop proficiency as a practitioner, teacher, leader/manager, and consumer of research. The course promotes integration of values into professional behaviors and accountability for personal and professional growth. Three hours Theory and twelve to sixteen hours clinical per week. Prerequisites: NURSING.306, NURSING.311, NURSING.312, and NURSING.314.	CLN	7	7
NURSING	412	ADULT HEALTH NURSE 2	Focuses on providing care for adult clients with complex needs. Students employ critical thinking to problem-solving and make decisions. Student use nursing process, therapeutic skills and technology in assisting these clients to attain an optimal level of functioning. They collaborate with clients and the interdisciplinary team to promote, maintain and restore optimal health to a variety of clients. Learning experiences provide opportunities for students to develop proficiency as a practitioner, teacher, leader/manager, and consumer of research. The course promotes integration of values into professional behaviors and accountability for personal and professional growth. Three hours Theory and twelve to sixteen hours clinical per week. Prerequisites: NURSING.306, NURSING.311, NURSING.312, and NURSING.314.	LEC	7	7
NURSING	414	LDRSHP & MGT NURSING	Focuses on management principles; including leadership theories and concepts, decision-making processes, budgeting guidelines and case management concepts. Content on public policy and health care economics is incorporated. Principles from this course are integrated into concurrent clinical courses to enhance professional role development for pre-licensure students and RN-BSN students. Three hours Theory and three hours practicum per week. May be offered in traditional and distance education formats. Prerequisites: NURSING.306, NURSING.311, NURSING.312, and NURSING.314 OR NURSING.305 for RN-BSN students.	CLN	4	4

NURSING	414	LDRSHP & MGT NURSING	Focuses on management principles; including leadership theories and concepts, decision-making processes, budgeting guidelines and case management concepts. Content on public policy and health care economics is incorporated. Principles from this course are integrated into concurrent clinical courses to enhance professional role development for pre-licensure students and RN-BSN students. Three hours Theory and three hours practicum per week. May be offered in traditional and distance education formats. Prerequisites: NURSING.306, NURSING.311, NURSING.312, and NURSING.314 OR NURSING.305 for RN-BSN students.	LEC	4	4
NURSING	493	HIS II NSG	A continuation of NURSING.492. For students who have demonstrated a high level of interest and ability in nursing. Students continue to apply the research process in the completion of a selected research problem/topic under the supervision of a faculty member of the Department of Nursing. This course is open to nursing students in the Honors Program. Prerequisites: NURSING.492 Honors Independent Study I.	IND	3	3
NURSING	501	THEOR ROLE DEV ADV	Focuses on the examination of philosophical and theoretical constructs related to role development in advanced nursing practice. Advanced practice domains of clinical practice, teaching and coaching, consultation, intra and inter-professional collaboration, care coordination, conflict resolution, research, nursing theory, leadership, quality improvement, advocacy, and ethical decision-making are explored. The reciprocal interrelationships among theory, theoretical frameworks and conceptual models, domains of practice, and research as integral components of nursing science development, evidence-based advanced nursing practice, education, and leadership are investigated. Theory development and strategies for the evaluation and testing of theories are explored. The student will identify concepts, principles and strategies inherent in a variety of nursing and related theories, (i.e., systems, change, professional socialization, leadership, chaos, complexity, organizational, etc.) to serve as a framework for the development and enrichment of own advanced practice roles. The student will analyze and apply the tenets of a conceptual model or theory of nursing to own philosophy of advanced nursing practice and potential practice issues/situations. Three hours lecture per week. When offered as a web-based course, three hours web based instruction per week. Prerequisites: None.	LEC	3	3
NURSING	502	EPID CONT NURS PRACT	Provides a conceptual orientation and knowledge of techniques from epidemiology as a basis for all aspects of population-based practice in advanced nursing. The epidemiological perspective is presented as a framework for assessing the well-being of populations and designing, implementing, and evaluating strategic nursing and healthcare interventions. Students will apply basic epidemiological research designs in the investigation, analysis, and proposed solutions to observed patterns of health states. Three hours lecture per week. When offered as a web-based course, three hours web based instruction per week.	LEC	3	3
NURSING	503	BASES RES ADV NURS	Provides a deeper understanding and critical appraisal of nursing research for application to evidence-based practice. Application of the steps of evidence based nursing practice is stressed. The proper formulation of Population Intervention Comparison Outcome Time (PICOT) questions, learning how to search relevant databases for evidence, critically appraising the evidence, and synthesizing the research findings are all emphasized. Development of a plan for implementation of the evidence and/or for generating additional evidence to improve nursing practice is addressed. Three hours lecture per week. Prerequisites: None.	LEC	3	3

NURSING	507	PHARM ACROSS LIFE APN	Provides the fundamentals of pharmacokinetic and pharmacodynamic properties of drugs across the lifespan affecting all body systems. Proper prescribing and monitoring procedures for various drug regimens used to treat common disease states are presented. Classification of pharmaceuticals will be reviewed in relation to indications for use and evidence of efficacy. Clinical usage of select drugs and rationale for drug therapy based on the relationship of physiologic factors of disease processes and drug mechanisms will be discussed. Adverse reactions, interactions, problems related to nutritional, developmental, and health status will be explored. Legalities and regulations of prescriptive privileges, sociocultural implications of drug therapy, and patient teaching are addressed. Prerequisites: NURSING.504.	LEC	3	3
NURSING	508	LIFE HEALTH ASSESS	This course focuses on developing the students competence in performing health/physical assessment across the lifespan. Learning experiences are provided for synthesizing cognitive knowledge with psychomotor skills. Throughout the course emphasis is placed on the importance of communication and observational skills in conducting a holistic assessment for the purpose of developing a thorough understanding of the individual in order to determine appropriate and effective health care, including health promotion strategies across the lifespan. This assessment includes genetic, social, environmental, functional, cultural, spiritual, psychosocial, developmental and comprehensive physical examination. Four credits theory, Two credits Clinical. Prerequisite or co-requisites: NURSING.504.	CLN	6	6
NURSING	508	LIFE HEALTH ASSESS	This course focuses on developing the students competence in performing health/physical assessment across the lifespan. Learning experiences are provided for synthesizing cognitive knowledge with psychomotor skills. Throughout the course emphasis is placed on the importance of communication and observational skills in conducting a holistic assessment for the purpose of developing a thorough understanding of the individual in order to determine appropriate and effective health care, including health promotion strategies across the lifespan. This assessment includes genetic, social, environmental, functional, cultural, spiritual, psychosocial, developmental and comprehensive physical examination. Four credits theory, Two credits Clinical. Prerequisite or co-requisites: NURSING.504.	LEC	6	6
NURSING	511	COMM HEALTH NURS 1	Focuses on the exploration and application of population-focused health nursing practice and role development. The graduate student participates in the analysis of current public health practice issues and the operationalization of health policies and advocacy to influence the health and health care of populations. The student integrates leadership principles and comprehensive public health knowledge to inform decision-making focused on improving population health. The student functions independently and in collaboration with others who influence the health care environment and the health of populations. A clinical practicum of 200 hours is required.	LEC	6	6

NURSING	512	ADLT HLTH/ILLNESS 1	Focuses on the role development of the clinical nurse specialist in adult health and illness. Students apply advanced knowledge, skills and critical thinking in the competent use of nursing process, therapeutic interventions, and technology to administer nursing services to a specific adult population to facilitate optimal wellness and to impact on the delivery of adult health care. Evaluation and refinement of a model for advanced practice provide a framework for holistic care of adult clients and one's development of the multifaceted roles as practitioner, educator, consultant and leader/manager. Leadership principles and strategies are employed as students collaborate with adult clients, support systems and variety of providers in diverse settings to promote, restore and maintain adult health. Through social, ethical and political actions, client advocacy and change process are encouraged to affect the quality of adult health care. Weekly seminar affords student's participation in analyzing current adult health care problems, trends/issues and in evaluating and formulating strategies for health care reform. Research skills are enhanced through seminar presentations, clinical practicum and course assignments. Two hours of theory and twelve hours of clinical per week. Prerequisites: NURSING.501, NURSING.502, NURSING.503, NURSING.504, NURSING.507 and NURSING.508.	LEC	6	6
NURSING	515	DX/MAN ADULT/AGED I	Focuses on the diagnosis and management of health problems in young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old and old-old adults) in the primary care setting. Emphasis is placed on developing knowledge related to the most common diagnoses and health problems across the entire adult-older adult age spectrum in primary care. These include, but are not limited to, cardiac, respiratory, endocrine, mental health, and renal diagnoses and problems. In addition, the course addresses issues related to the role of the nurse practitioner and provides opportunities to discuss these as the student begins the transition to this advanced practice nursing role in primary care. Prerequisites: NURSING.507 (may be taken as a co-requisite) and NURSING.508.	CLN	6	6
NURSING	515	DX/MAN ADULT/AGED I	Focuses on the diagnosis and management of health problems in young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old and old-old adults) in the primary care setting. Emphasis is placed on developing knowledge related to the most common diagnoses and health problems across the entire adult-older adult age spectrum in primary care. These include, but are not limited to, cardiac, respiratory, endocrine, mental health, and renal diagnoses and problems. In addition, the course addresses issues related to the role of the nurse practitioner and provides opportunities to discuss these as the student begins the transition to this advanced practice nursing role in primary care. Prerequisites: NURSING.507 (may be taken as a co-requisite) and NURSING.508.	LEC	6	6
NURSING	517	DX/MAN CHILD & PREG WOMEN	Focuses on the assessment, diagnosis, and management of infants, toddlers, children, and pregnant women with common episodic and chronic conditions within the context of their families, social environment, and culture. Emphasis is on the developmental stages, age appropriate primary and secondary prevention and risk reduction strategies using evidence-based guidelines. In addition, the course addresses issues related to the role of the nurse practitioner and provides opportunities to discuss these as the student begins the transition to the family nurse practitioner role in primary care. Prerequisites: NURSING.515 and NURSING.516.	CLN	6	6
NURSING	517	DX/MAN CHILD & PREG WOMEN	Focuses on the assessment, diagnosis, and management of infants, toddlers, children, and pregnant women with common episodic and chronic conditions within the context of their families, social environment, and culture. Emphasis is on the developmental stages, age appropriate primary and secondary prevention and risk reduction strategies using evidence-based guidelines. In addition, the course addresses issues related to the role of the nurse practitioner and provides opportunities to discuss these as the student begins the transition to the family nurse practitioner role in primary care. Prerequisites: NURSING.515 and NURSING.516.	LEC	6	6

NURSING	524	SCI FND ANEST NUR II	A detailed study of the techniques and procedures utilized in caring for the trauma, obstetric, pediatric, or elderly patient. A section on regional anesthesia, acute and chronic pain, and the complications of anesthesiology is also presented at this time. Prerequisites: NURSING.518, NURSING.523, NURSING.525, NURSING.526, NURSING.535, NURSING.536 and Concurrent with NURSING.527, NURSING.537.	LEC	3	3
NURSING	527	ADV PHY ANEST NUR II	The study of the anatomic structures and related physicochemical mechanisms governing neurologic, endocrine, immune, hepatic, and renal function for advanced nursing practice in anesthesia. Prerequisites: NURSING.518, NURSING.523, NURSING.525, NURSING.526, NURSING.535, NURSING.536 and Concurrent with NURSING.524, NURSING.537.	LEC	3	3
NURSING	534	ADULT GERO SEM	Provides an opportunity for the student to apply knowledge gained throughout the program while gaining entry-level competence in the clinical area. Both clinical and professional role issues are addressed in the theory seminar. Clinical issues will include management of complex patients. Professional issues to be addressed will include assessment of organizations as practice settings, quality of care and risk management, and professional responsibilities of practice. These issues include the influence of, and on, health policy, continuing education, the health education of the community, and clinical research. The focus of the course throughout is on developing confidence and competence as an adult/gerontology primary care nurse practitioner. Prerequisite: NURSING.516.	CLN	6	6
NURSING	534	ADULT GERO SEM	Provides an opportunity for the student to apply knowledge gained throughout the program while gaining entry-level competence in the clinical area. Both clinical and professional role issues are addressed in the theory seminar. Clinical issues will include management of complex patients. Professional issues to be addressed will include assessment of organizations as practice settings, quality of care and risk management, and professional responsibilities of practice. These issues include the influence of, and on, health policy, continuing education, the health education of the community, and clinical research. The focus of the course throughout is on developing confidence and competence as an adult/gerontology primary care nurse practitioner. Prerequisite: NURSING.516.	LEC	6	6
NURSING	537	ANES NSG PRC CONF III	A continuation of NURSING.535 and NURSING.536 with the addition of enriching and innovative anesthesia experiences which broadens and improves the quality of the advanced nursing practice in anesthesia. Clinical case conferences will focus on case presentations, mortality and morbidity reviews and departmental in-service presentations. Students will have the opportunity to lead and critique presentations made by peers during clinical case conferences.. Prerequisites: NURSING.518, NURSING.523, NURSING.525, NURSING.526, NURSING.535, NURSING.536 and Concurrent with NURSING.524, NURSING.527.	LEC	3	3
NURSING	540	AD ANES NSG PRC CIII	Emphasize the development of an independent practitioner who can assume a leadership role as a member of the anesthesiology community. Performance improvement measures are addressed in this last practicum course. To enhance the scholarly development of the student, additional time is spent on an area of interest with the expectation that meaningful clinical research will be conducted. An evidence-based practice issue will be explored and will culminate in a paper submitted for publication and a professional presentation. An additional focus of this course is on preparation for the National Certification examination. Prerequisites: NURSING.523, 524, 525, 526, 527, 528, 535, 536, 537, 538 and 539.	CLN	5	5

NURSING	540	AD ANES NSG PRC CIII	Emphasize the development of an independent practitioner who can assume a leadership role as a member of the anesthesiology community. Performance improvement measures are addressed in this last practicum course. To enhance the scholarly development of the student, additional time is spent on an area of interest with the expectation that meaningful clinical research will be conducted. An evidence-based practice issue will be explored and will culminate in a paper submitted for publication and a professional presentation. An additional focus of this course is on preparation for the National Certification examination. Prerequisites: NURSING.523, 524, 525, 526, 527, 528, 535, 536, 537, 538 and 539.	LEC	5	5
PHIL	110	CRITICAL THINKING	Surveys several forms of argument, including inductive, deductive, analogical and legal reasoning, in order to teach students how to construct and evaluate arguments effectively. Designed for students who aim to improve critical thinking skills. This course fulfills requirements for the Philosophy major and minor. Three hours lecture per week. Open to all students. Prerequisites: None. This course earns three GEPs toward Goal 3 Quantitative Reasoning in general education.	LEC	3	3
PHIL	111	INTRO TO PHILOSOPHY	Presents reflective inquiry into selected problems of general philosophic interest. Considers the types of knowledge, Individual and social values, free will, the nature of the self, the nature of reality and the existence of God. This course earns three GEPs toward Goal 7 Arts and Humanities in general education, and fulfills requirements for the Philosophy major and minor. Three hours lecture per week. Open to all students, Prerequisites: None.	LEC	3	3
PHIL	270	LOGIC	Surveys modern theories of deductive logic, first as they apply to non-qualified sentences and then as they apply to quantified sentences. Students learn a formal order deductive language as well as techniques for translating sentences into first order languages and detecting logical truth and implication in first order languages. This course can be taken to fulfill General Education (3 GEPs for Goal 3, Analytical and Quantitative Skills), and for the Philosophy major and minor. Although the target audience for this course includes predominantly philosophy majors, math majors, and any major for which analytical and/or quantitative reasoning skills are relevant, the course has no prerequisites and is open to all majors. Three lecture hours per week.	LEC	3	3
PHIL	290	MEDICAL ETHICS	Presents reflective inquiry into selected problems in medical ethics. Students consider the diversity of perspectives on ethical issues in the practice of medicine such as the physician-patient relationship, patient autonomy, informed consent, assisted suicide, justice in the distribution of health care, and the moral risks of genetic testing. This course applies to the Philosophy major and minor. Three hours lecture per week. Open to all students. May be offered in traditional and distance education formats. Prerequisites: None. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education.	LEC	3	3
PHIL	295	BUSINESS ETHICS	Presents reflective inquiry into selected problems in business ethics. Students consider the diversity of perspectives on ethical issues in the practice of business such as corporate social responsibility, property rights and profit, job discrimination, sexual harassment, whistle blowing, and employee rights. This course applies for the Philosophy major and minor. Three hours lecture per week. Open to all students. Prerequisites: None. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education.	LEC	3	3

PHIL	297	ETHICS	Presents reflective inquiry into selected problems in theoretical ethics. Considers varieties of ethical theories, such as deontology, consequentialism, egoism, relativism, virtue ethics, divine command theory, feminism, challenges to those theories, and application to examples. This course applies to the Philosophy major and minor. Three hours lecture per week. Open to all students. Prerequisites: None. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education.	LEC	3	3
PHIL	324	DESCARTES TO KANT	Examines the writings of the 17th and 18th century philosophers: Descartes, Hobbes, Locke, Berkeley, Hume, Kant and others. Topics include: the nature of reality, the sources and limits of knowledge, the relation between mind and body and the possibility of a rational basis for religious belief. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	LEC	3	3
PHIL	328	EXISTENTIALISM	Studies the writings of philosophers and theologians such as Kierkegaard, Nietzsche, Husserl, Sartre, Camus, and Dostoevsky. Major themes include human subjectivity, human freedom, alienation and meaning. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	LEC	3	3
PHIL	404	PHIL OF SOC SCI	Examines philosophical problems in the social sciences including objectivity, classification, explanation, the nature of laws and the nature of social facts. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	LEC	3	3
PHIL	408	FEMINIST PHILOSOPHY	Explores the major trends in feminist philosophy including liberal, Marxist, socialist, radical and psychoanalytic approaches. Explores such questions as whether women's experience differs from men's and the extent to which male domination informs woman's experience. Considers recent feminist attempts to articulate an emancipating standpoint. This course is approved as a Diversity General Education Course/This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	LEC	3	3
PHIL	420	METAPHYSICS	Introduces the main themes and literature in contemporary metaphysics. Issues explored include why there is something rather than nothing? Are there properties, numbers, propositions and sets? What are holes, surfaces and boundaries? Can an object change its parts and remain the same? This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week. Prerequisite: at least one philosophy course other than PHIL.110 or PHIL.270 is required.	LEC	3	3
PHIL	470	INDEPENDENT STUDY	Provides for individual study of a particular philosophical problem under the guidance of the staff. Emphasizes independent research on topics selected by the student and the faculty member. Course may be taken twice. Prerequisite: 6 semester hours of philosophy. See section on Independent Study.	IND	3	3
PHYSICS	103	PRIN PHYS SCI 1	Provides an introduction to the basic concepts of physical science by studying such topics as the structure and properties of matter, motion and forces, energy, light and sound, electricity and magnetism, and astronomy. It is designed for elementary education and special education majors. Four hours of integrated class/laboratory time per week. This course earns one GEP toward Goal 3 Quantitative Reasoning and two GEPs toward Goal 5 Natural Sciences in general education. Prerequisite: None.	LEC	3	3
PHYSICS	104	ELEM ELECTRONICS		LEC	3	3

PHYSICS	105	ENERGY:SOURC ENV EFF	Explains energy in elementary scientific terms and examines present national and international energy situations in regard to sources, utilization and environmental effects. Surveys fossil fuels and nuclear, solar, geothermal and other energies with respect to availability and promise for the future. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: None. Three Hours lecture per week.	LEC	3	3
PHYSICS	106	SCIENCE OF SOUND	Provides an introduction to the principles of sound and its reproduction. Familiarity with college-level algebra and basic trigonometry required, but no experience in physics or electronics necessary. Three hours of lecture per week. Prerequisites: None.	LEC	3	3
PHYSICS	107	APPL PHYSIC HEAL SCI	Studies selected principles of physics with applications to the processes and instrumentation of medical technology and imaging. Examines mechanics kinetic energy and heat, electricity and magnetism, electronics, atomic structure, radiation and medical imaging and reconstruction . Six hours per week: 3 hours lecture, 3 hours laboratory. This course earns one GEPs toward Goal 3 Quantitative Reasoning and two GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: None.	LAB	4	4
PHYSICS	107	APPL PHYSIC HEAL SCI	Studies selected principles of physics with applications to the processes and instrumentation of medical technology and imaging. Examines mechanics kinetic energy and heat, electricity and magnetism, electronics, atomic structure, radiation and medical imaging and reconstruction . Six hours per week: 3 hours lecture, 3 hours laboratory. This course earns one GEPs toward Goal 3 Quantitative Reasoning and two GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: None.	LEC	4	4
PHYSICS	110	INTRO TO ASTRONOMY	Surveys the physical state of the universe and the variety of objects it comprises: the solar system, stars, and galaxies. When possible, evening telescopic observing sessions will be periodically scheduled. Provides both a descriptive account of the present state of our knowledge of the cosmos and an understanding of how such knowledge is obtained. Intended for non-science majors. This course earns three GEPs toward Goal 5 Natural Sciences in general education. Three class hours per week. May be offered in traditional and distance education formats. Prerequisites: None.	LEC	3	3
PHYSICS	112	INTRO PHYSICS 2	Studies electricity, magnetism, light, relativity, quantum and atomic theory, structure of matter, nuclear physics and particle physics. Continuation of PHYSICS.201. Although calculus is not used, familiarity with college-level algebra and basic trigonometry is assumed. Six hours per week: 3 hours lecture, 3 hours laboratory. Prerequisite: PHYSICS.201 or consent of instructor."	LAB	4	4
PHYSICS	112	INTRO PHYSICS 2	Studies electricity, magnetism, light, relativity, quantum and atomic theory, structure of matter, nuclear physics and particle physics. Continuation of PHYSICS.201. Although calculus is not used, familiarity with college-level algebra and basic trigonometry is assumed. Six hours per week: 3 hours lecture, 3 hours laboratory. Prerequisite: PHYSICS.201 or consent of instructor."	LEC	4	4
PHYSICS	211	GENERAL PHYSICS 1	Provides an introduction to physics using Calculus. Studies mechanics, the physics of fluids, kinetic theory, oscillations, waves, heat and thermodynamics. Appropriate for physical science or mathematics majors. Six hours per week: 3 hours lecture, 3 hours laboratory. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: MATH.125 or concurrent.	LAB	4	4

PHYSICS	211	GENERAL PHYSICS 1	Provides an introduction to physics using Calculus. Studies mechanics, the physics of fluids, kinetic theory, oscillations, waves, heat and thermodynamics. Appropriate for physical science or mathematics majors. Six hours per week: 3 hours lecture, 3 hours laboratory. This course earns one GEP toward Goal 3 Quantitative Reasoning and three GEPs toward Goal 5 Natural Sciences in general education. Prerequisites: MATH.125 or concurrent.	LEC	4	4
PHYSICS	212	GENERAL PHYSICS 2	Studies wave motion, sound, geometrical and physical optics, electricity and magnetism. Continuation of PHYSICS.211. Six hours per week: 3 classes, 3 laboratories. Prerequisites: MATH.126 or concurrent registration; PHYSICS.211 or PHYSICS.111 with consent of instructor.	LAB	4	4
PHYSICS	212	GENERAL PHYSICS 2	Studies wave motion, sound, geometrical and physical optics, electricity and magnetism. Continuation of PHYSICS.211. Six hours per week: 3 classes, 3 laboratories. Prerequisites: MATH.126 or concurrent registration; PHYSICS.211 or PHYSICS.111 with consent of instructor.	LEC	4	4
PHYSICS	302	MECHANICS: DYNAMICS	Introduces the fundamentals of dynamics, with an emphasis on vector methods, at a level appropriate for physical science majors and for students considering a career in an engineering field. Three hours of lecture per week. Prerequisites: MATH.225 or concurrent registration; PHYSICS.212 or PHYSICS.112 with consent of the instructor.	LEC	3	3
PHYSICS	310	MODERN ATOMIC PHYS	Presents some of the basic concepts and phenomena that constitute modern physics, including studies of the quantum nature of radiation, atomic structure and spectra, X-rays, relativity, wave-particle duality, the uncertainty principle and a brief introduction to nuclear physics and radioactivity. Three hours of lecture per week. Prerequisite: PHYSICS.212 or PHYSICS.112 with consent of instructor, MATH.126.	LEC	3	3
PHYSICS	315	ELECTRONICS	Presents the theory and application of semiconductors with special emphasis on circuitry. Studies basic electronic instrumentation as related to the gathering, processing and display of scientific data in any discipline. Six hours per week: 3 classes, 3 laboratories. Prerequisite: PHYSICS.112 or PHYSICS.212 or ENGTECH.141.	LAB	4	4
PHYSICS	315	ELECTRONICS	Presents the theory and application of semiconductors with special emphasis on circuitry. Studies basic electronic instrumentation as related to the gathering, processing and display of scientific data in any discipline. Six hours per week: 3 classes, 3 laboratories. Prerequisite: PHYSICS.112 or PHYSICS.212 or ENGTECH.141.	LEC	4	4
PHYSICS	317	COMPUTER ELECTRONICS	An introduction to the electronics and operation of digital computers. Intended for students with a background in digital circuitry. Includes practical experience of the operation and interfacing of microprocessors and other devices. Three hours of lecture per week. Prerequisite: PHYSICS.316 or consent of instructor.	LEC	3	3
PHYSICS	340	ASTROPHYSICS: STARS	Focuses on a physical interpretation of the nature of stars (including the sun), their structure and evolution, and on the techniques used in interpreting the radiation we receive from them. Three hours of lecture per week. Prerequisites: MATH.126 and PHYSICS.112 or PHYSICS.212.	LEC	3	3
PHYSICS	400	ADVAN PHYSICS LAB	Presents the basic tenets of lab work in physics, involving considerations of experimental error, proper research and preparation of an experiment. Includes experiments primarily from the areas of atomic physics, electricity, magnetism and optics. 3 laboratory hours per week. Prerequisites: PHYSICS.310.	LAB	2	2

PHYSICS	460	APP HEALTH PHYSICS	Presents advanced topics involving health physics principles and radiation protection standards as applied to science, industry and medicine. Three hours of lecture per week. Prerequisite: PHYSICS.360.	LEC	3	3
PHYSICS	482	HP RESEARCH 1	Provides for an application of theoretical and/or experimental research methods to a special problem in Health Physics. A written report is required. May be interdisciplinary. A plan, acceptable to the student and the supervising instructor, must be approved in advance by the department chairperson. Prerequisites: Junior standing. Pre-registration approval by the department chairperson of a plan prepared by the supervising instructor and student.	IND	1	3
PHYSICS	490	SEMINAR IN PHYSICS	A selected topic in physics is studied and prepared in a form suitable for presentation. Student attends and participates in physics seminars and makes a presentation in the same semester of enrollment in the course. One hour of lecture per week.	LEC	1	1
PHYSICS	492	PHYSICS RESEARCH 1	Provides for an application of theoretical and/or experimental research methods to a special problem. May be interdisciplinary. Requires the preparation of a report and a plan, approved in advance by the department chairperson, which is acceptable to the student and the supervising faculty member.	IND	1	3
PHYSICS	493	PHYSICS RESEARCH 2	Provides for an application of theoretical and/or experimental research methods to a special problem, beyond the experience of Physics Research I. May be interdisciplinary. Requires the preparation of a report and a plan, approved in advance by the department chairperson, which is acceptable to the student and the supervising faculty member. Prerequisites: junior standing. Pre-registration approval by department chair of a plan prepared by the supervising instructor and student.	IND	1	3
POLISCI	101	ELEMENTS OF POL SCI	Surveys basic concepts and theories related to the study of Political Science and applies this material to a diverse range of cultural and institutional settings. Students gain significant exposure to salient current events. This course is open to all students and serves as an elective for the minor in Political Science. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 6 Social Sciences in general education. May be offered in traditional and distance education formats. Three hours lecture per week. This course does not count toward the political science major. Prerequisites: None.	LEC	3	3
POLISCI	108	CONT POL IDEOLOGIES	Investigates a broad range of political positions with regard to contemporary issues and examines various ideological perspectives from which citizens attempt to promote justice within the political system. The course fulfills requirements for the Political Science major and minor, and is open to all students. Course consists of three hours of lecture per week and is offered fall and spring semesters. This course earns two GEPs toward Goal 10 Citizenship in general education. Prerequisites: None.	LEC	3	3
POLISCI	120	U S GOVERNMENT	Introduces the formation of United States Government, the Constitutional basis of government, governmental structure, citizen input, law making and the development of public policy. The course provides students with the skills and knowledge to be responsible citizens. It is open to all students and is required of Political Science majors and minors. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 10 Citizenship in general education. May be offered in traditional and distance education formats. Prerequisites: None. Three hours lecture per week.	LEC	3	3

POLISCI	280	INTRO TO INT'L REL	Surveys the major theories and concepts used by international relations scholars; explores the relations among states and other political and economic actors in international relations; and analyzes major issues in contemporary international relations, focusing in particular on how to apply relevant theories to explaining those issues. Three hours of lecture per week. This course is open to all students and is required for Political Science majors. Prerequisites: None. May be offered in traditional and distance education formats. This course earns three GEPs toward Goal 6 Social Sciences in general education.	LEC	3	3
POLISCI	300	POLISCI RESEARCH	Introduces students to the application of the scientific method in political science. Students learn the basics of research design, including formulating research questions, designing testable hypotheses, writing a formal literature review, and conducting basic empirical analysis using quantitative and/or qualitative methods. The method of delivery is face to face, and the course is usually offered every semester. Prerequisites: Complete university math course with MATH designation; complete POLISCI 120, POLISCI 260 and POLISCI 280 with grade of C or better; or complete POLISCI 300 concurrently with POLISCI 120, POLISCI 260 and POLISCI 280; or by permission of the chair.	LEC	3	3
POLISCI	326	PARTIES GROUPS & P O	Examines the core concepts, theories, and issues associated with the study of political parties, interest groups and public opinion in political science. The method of delivery is face to face, and the course is offered approximately every two years. Prerequisites: 30 completed credits.	LEC	3	3
POLISCI	360	NATIONS, STATES, GOV	Examines core theories, methods, and concepts in the field of comparative politics. To illustrate these topics, the course draws on a diverse range of country examples representing developed and less developed states, advanced democracies and autocratic regimes, and different cultural traditions. This is a required course for the major and minor. The method of delivery is either face to face or distance education. There are no prerequisites. This course provides 1 GEP in Goal 3 (Analytical and Quantitative Skills) and 2 GEP's in Goal 6 (Social Sciences) for General Education.	LEC	3	3
POLISCI	366	POL SYS WEST EUROPE	Examines the political institutions, policies, and salient issues of European advanced democracies and the European Union. The method of delivery is face to face, and the course is offered approximately once every other year. Prerequisites: 30 completed credits.	LEC	3	3
POLISCI	405	DEVELOP POL THOUGHT	Investigates the work of a number of theorists who are considered major political thinkers in the western tradition. Theoretical readings are selected to emphasize the primary political influences on the world through the ancient, medieval, modern and post-modern periods. The central question is the purpose of the political community and the system of government necessary to procure those ends. The method of delivery is face to face, and the course is offered at least once per year. Prerequisites: Earned grade of C or better in POLISCI 108; earned grade of C or better in POLISCI 300 or taking POLISCI 300 concurrently with this course; or by permission from the instructor.	LEC	3	3
POLISCI	437	PUB ADM APPLICATION	Provides a broad range of theoretical and empirical aspects of applied public management; examines theories about leadership, organization management, motivation, competition, cooperation, and communication in the real-world workplace scenarios; analyzes the problems of personnel management, public budgeting, and strategic planning; acquires professional skills through the use of case studies to simulate the workplace experience. This course fulfills the requirement in the Public Administration track. May be offered in traditional and distance education formats. Prerequisites: 30 earned credits.	LEC	3	3

POLISCI	446	CONSTITUTIONAL LAW 1	Analyzes the evolution, structure and function of the Supreme Court, concentrating on a case study approach of the court's interpretations of the powers of the president, Congress and federal-state relationships. The method of delivery is face to face, and the course is offered approximately every two years. Prerequisites: 60 completed credits.	LEC	3	3
POLISCI	452	STATE & LOCAL GOVT	Explores in-depth the nature of state and local politics in the American political system. Within this context, students will explore how differences in institutional design and political culture affect aspects of political behavior as well as the design and implementation of various public policies. The method of delivery is face to face and the course is usually offered once per year. Prerequisites: 30 completed credits.	LEC	3	3
POLISCI	470	POLI SCI CAPSTONE	Provides students with an opportunity to demonstrate knowledge and concepts learned throughout their time as a political science major and bring together disparate materials in the discipline into an understandable whole. Prerequisite: Must have earned at least 100 credits. For majors only.	LEC	1	1
POLISCI	492	SEMINAR-GOVT & POL	Examines problems in government and politics in an attempt to review and unify theories and methods of political science. Emphasizes individual research projects. This course counts as a Group B, Social and Behavioral Sciences General Education Requirements. Three hours lecture per week.	SEM	3	3
POLISCI	497	INTERNSHIP POL SCI	Provides for on-site work experience and training designed to give the student an opportunity to apply the theoretical and descriptive knowledge acquired in the classroom. The student is supervised by a faculty member instructor and an on-site internship supervisor. The method of delivery is face to face, and the course is usually offered every semester based on student need. Prerequisites: Complete all core courses in Political Science (POLISCI108, POLISCI 120, POLISCI 260, POLISCI 280); complete POLISCI 300; complete at least 4 out of 6 advanced/elective courses by the start of the internship; cumulative GPA of at least 2.00; gain permission from academic advisor; complete at least 60 credit hours, or by permission of the department chair.	SUP	1	15
PROFSTUD	301	TEACH LEARN & ASSESS	A study of how teaching, learning and assessment are used collectively in kindergarten through twelfth grade classroom settings. The emphasis is on how teaching, learning and assessment are impacted by the Pennsylvania Academic Standards and effectively used by the teaching professional. Presents appropriate standards-based pedagogy, utilizing researched-based practices to train preservice teachers. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: 48 Credit hours.	LEC	3	3
PROFSTUD	312	INTERNSHIP IN EDUC	A work study program in an education-related setting applicable to fulfilling free electives in teacher education degree programs.	SUP	1	15
PROFSTUD	432	HONORS IND STUDY PS2	Independent study, under guidance of a faculty mentor, of a substantial research or creative topic.	IND	3	3
PROFSTUD	494	ELL STRAT. & METHODS	This course is designed for pre-service and practicing professionals providing ELL instruction. Participants will be able to identify, design, and implement ELL program materials to facilitate English proficiency and academic standards. Instructional materials and strategies will be based on educational and language learning theory to develop appropriate methodology to use with children at diverse levels of English Proficiency. This course is designed to meet the ELL Program Specialist certification for instructional materials/development. This course satisfies 3 credits of the communication requirement for general education. Three hours lecture per week.	LEC	3	3

PROFSTUD	500	GRAD PROF SEMINAR	Provides all students at entrance to graduate programs in the College of Education (and Professional Education Unit), the Graduate Professional Seminar (GPS) a non-credit "pathway" course. The faculty of the COE Advanced Programs at Bloomsburg University have designed the GPS to facilitate graduate students in developing an understanding of core programmatic requirements, scholarly demands and competency expectations (collaborative abilities, critical-thinking skills, rigor/relevance integration, etc.). Additionally, this seminar is designed to build a foundation for the student's graduate experience and future professional career. May be offered in traditional and distance education formats. Prerequisites: Admission to the Graduate Program.	SEM	0	0
PROFSTUD	501	TEACH LEARN & ASSESS	A study of how teaching, learning and assessment are used collectively in kindergarten through twelfth grade classroom settings. The emphasis is on how teaching, learning and assessment are impacted by the Pennsylvania Academic Standards and effectively used by the teaching professional. Presents appropriate standards based pedagogy, utilizing researched-based practices to train preservice teachers. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: None.	LEC	3	3
PROFSTUD	525	INTERN IN EDUC ADMIN	Provides each candidate with on-the-job experiences and opportunities to reflect on the impact of his/her leadership. The internship affords candidates a realistic notion of school administration and unlimited learning opportunities. Prerequisites: Completion of core required courses or permission of instructor.	SUP	3	9
PROFSTUD	591	RESEARCH IN EDUC	Studies methods and techniques used in educational research; development and interpretation of statistical data and application to professional problems. Three hours lecture per week.	LEC	3	3
PROFSTUD	594	ELL STRAT. & METHODS	This course is designed for pre-service and practicing professionals providing ESL instruction. Participants will be able to identify design, and implement ESP program materials to facilitate English proficiency and academic standards. Instructional materials and strategies will be based on educational and language learning theory to develop appropriate methodology to use with children at diverse levels of English Proficiency. This course is designed to meet the ESL Program Specialist certification for instructional materials/development. Three hours lecture per week.	LEC	3	3
PROFSTUD	599	THESIS	Student demonstrates ability to employ accepted methods of educational research in the solution or intensive study of some problem area of interest or concern. The problem area selected for the research project must be related to the curriculum that the student is pursuing.	THE	3	6
PSYCH	101	GENERAL PSYCHOLOGY	Studies psychology as a system of scientific inquiry into behavior, mental processes, and social relationships. Major concepts and principles of the discipline are presented. This foundational class has no prerequisites. This course may be taken to fulfill General Education (3 GEPs for Goal 6, Social Sciences), psychology major or psychology minor requirements. Three hours of lecture per week.	LEC	3	3
PSYCH	101	GENERAL PSYCHOLOGY	Studies psychology as a system of scientific inquiry into behavior, mental processes, and social relationships. Major concepts and principles of the discipline are presented. This foundational class has no prerequisites. This course may be taken to fulfill General Education (3 GEPs for Goal 6, Social Sciences), psychology major or psychology minor requirements. Three hours of lecture per week.	LEC	3	3

PSYCH	131	PSY OF ADJUSTMENT	Examines the personal and social meaning of psychological adjustment. Emphasizes growth and well-being, concepts of stress and coping, and psychosocial competence in adulthood. This course requires active participation in class discussion and willingness to challenge one's preconceptions and consider alternative psychological points of view. It concerns the application of psychological concepts and research to stress and coping in everyday adult life, emphasizing coping skills and techniques. This course is an elective and offers 2 GEPs for Goal 10 - Citizenship. Prerequisites: None.	LEC	3	3
PSYCH	160	APP STAT FOR BEH SCI	Introduces and applies fundamental statistical concepts, principles, and procedures to the analysis of data related to the behavioral sciences. Students learn computation, interpretation, and application of commonly used descriptive, correlational, and inferential statistical procedures as they relate to behavioral science research. It is required for students majoring or minoring in Psychology, and is offered every semester. This course earns two GEPs toward Goal 3 Analytical and Quantitative Skills in general education. Prerequisite: None. Three hours lecture per week.	LEC	3	3
PSYCH	210	LIFE SPAN PSYCHOLOGY	Examines concepts and issues related to human development from conception to death. Summarizes major developmental milestones in physical, cognitive, and social-emotional development. Discusses major theories and perspectives on human development. This course counts toward a psychology minor and is an elective for psychology majors. Prerequisite: PSYCH.101.	LEC	3	3
PSYCH	211	EARLY CHILD DEV	Examines concepts and issues related to child development from the prenatal period through middle childhood. Summarizes major concepts, theories, research, and best practices in physical, cognitive, social, and emotional development. Multiple sections of PSYCH 211 are typically offered every semester. Prerequisites: PSYCH 101 - Intro to Psychology.	LEC	3	3
PSYCH	214	TRANSITION TO ADOL	Studies the transition from childhood to adolescence, including physical, cognitive, social and emotional development. Theory, research and the application of these to practice will be emphasized. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: PSYCH.101.	LEC	3	3
PSYCH	218	PRIN OF GERONTOLOGY	Examines areas of growth and decline in the lives of adults in their sixties and older. The themes of successful aging and positive psychology are emphasized, along with cultural, lifestyle, gender-based and individual differences. The course explores the areas of family and intimate relationships, employment, retirement, civic engagement, and life-long learning, cognitive and intellectual functioning, and changes in personality and self-concept. The areas of coping, assistive technologies, financial assistance, housing assistance, involvement with a caregiver, and end-of-life decisions are also explored. This course is offered in spring semesters. Three hours lecture per week. Prerequisites: PSYCH.101.	LEC	3	3
PSYCH	235	INTR ABNORMAL PSYCH	Introduces the nature, diagnosis, etiology, epidemiology, prevention and treatment of cognitive, affective, behavioral and personality disorders. Also covers relevant theoretical perspectives and research findings. This course counts toward the psychology minor and is an elective for psychology majors. Prerequisites: PSYCH 101 - Introduction to Psychology.	LEC	3	3
PSYCH	253	SOCIAL PSYCHOLOGY	Introduces the scientific study of how people's thoughts, feelings, and behaviors are affected by the actual, imagined, or implied presence of others. Topics include social perception and cognition, aggression, conformity, helping behavior, relationships, group processes. Course is intended for psychology majors and minors. Three hours lecture per week. Prerequisite: PSYCH.101.	LEC	3	3

PSYCH	281	EXPER PSY:METHDOLOGY	Builds on students' background in Applied Statistics (PSYCH 160) and affords opportunities for students to interpret and design basic psychological research, improve their information literacy, and apply APA ethical standards. Topics covered include the scientific method, research approaches and designs, and ethical issues in psychological research. The course counts towards the Psychology major and minor. Prerequisites: PSYCH 101 and PSYCH 160 (with a minimum grade of C in each). The course may only be repeated once.	LEC	3	3
PSYCH	282	EXPER PSY:APPLICATNS	Allows students to use their background in applied statistics (PSYCH 160) and research methodology (PSYCH 281) to design and/or conduct studies with human participants and non-human animal subjects. This course affords opportunities for students to improve their information literacy, apply APA ethical standards, and learn to write effectively in psychology. The course counts towards the psychology major. Prerequisites: PSYCH 101, PSYCH 160 and PSYCH 281 (with a minimum grade of C in each).	LEC	3	3
PSYCH	309	COG DEV	Studies cognitive development in humans. Focus is on theories of cognitive development and research on the development of memory, problem solving, language and literacy, intelligence, neurological correlates of cognition, as well as social cognition. Factors affecting motivation, achievement, and self-control may also be considered. Additional emphasis placed on instructional implications of theories and research. Counts for the Psychology minor. This course is an elective for Psychology majors. Prerequisites: PSYCH 101, PSYCH 211 or PSYCH 212 and 60 credits earned.	LEC	3	3
PSYCH	335	PSYCHOL DISORDERS	Surveys the description, causation, prevention and treatment of maladaptive behavior and psychological disorders. Considers biological, psychological and social factors. Also covers relevant theoretical perspectives and research findings. This course counts for the psychology major. Prerequisites: PSYCH.101, PSYCH.160, PSYCH.281, all with minimum grade of C, and PSYCH.282.	LEC	3	3
PSYCH	340	COMMUNITY PSYCHOLOGY	Surveys theory, research and action concerning the relationships between the individual and community life. Topics include the psychological sense of community, human diversity, promotion of health and socioemotional competence, citizen participation, community change and methods of community research. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisites: PSYCH.101, PSYCH.160, PSYCH.281, all with minimum grade of C, or consent of the instructor.	LEC	3	3
PSYCH	341	THEORY PRAC ACAD PSY	Utilizes a seminar format classroom experience along with opportunities to work with students in PSYCH 101 through discussions, presentations, reviews, and tutoring. Using PSYCH 101 content, students will explore pedagogical techniques and assessment methods. There is a strong emphasis on ethical and professional behaviors in all interactions, including those with PSYCH 101 students and other teaching assistants. As part of this capstone experience designed for psychology majors, students will develop items as part of a professional portfolio as preparation for employment or graduate work. This course counts toward a psychology major. Prerequisites: PSYCH 101, PSYCH 160, PSYCH 281 (minimum of C in each), and PSYCH 282, 60 earned credit hours, and permission of the instructor.	LEC	3	3
PSYCH	350	PSYCHOLGY OF GENDER	1Examines the theoretical and research issues in psychological experiences of males and females. Views gender role development and implications for the daily lives of men and women from historical, biological, psychoanalytic, learning, sociological and anthropological perspectives. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisites: PSYCH.101, PSYCH.160, PSYCH.281, all with minimum grade of C, or consent of the instructor.	LEC	3	3

PSYCH	360	COGNITIVE PSYCHOLOGY	Studies cognition in humans. Research and theory related to human use of attention, perception, memory, language and problem solving are central topics of study. Other topics may include creativity, reasoning, and decision-making. Traditional research approaches to understanding human thinking, as well as neuroscientific approaches, are presented. Counts toward the Psychology major. Prerequisites: PSYCH.101, PSYCH.160, PSYCH.281, all with minimum grade of C, PSYCH.282.	LEC	3	3
PSYCH	375	PSY OF LEARNING	Examines the theoretical and experimental bases of learning in animal and human behavior. The course focuses on basic principles of classical conditioning and operant conditioning. Psychology of Learning is offered for major. Prerequisites: PSYCH 101, PSYCH 160, PSYCH 281 (minimum of C in each) and PSYCH 282.	LEC	3	3
PSYCH	380	BEHAVIORAL NEUROSCI	Examines the cellular bases of behavior, emphasizing contemporary views of and approaches to the study of the nervous system. Neural structure, function, and organization are considered in relation to sensory and motor function, learning and memory, and other basic behaviors. An overview of brain function will be presented, drawing on basic concepts in the biological, physical, and behavioral sciences. This course counts for the psychology major. Prerequisites: PSYCH.101, PSYCH.160, PSYCH.281 (minimum grade of C in each), PSYCH.282.	LEC	3	3
PSYCH	401	HISTORY OF PSYCHOL	Examines the history of psychology. Places the discipline of psychology in historical context in relation to the philosophical and scientific underpinnings of the field, as well as in relation to social and cultural influences on the development of the discipline. Reviews historical trends in research questions, methodologies, and explanations. Discusses major figures in the history of the field. This course counts toward the Psychology major. Prerequisites: PSYCH 101, PSYCH 160 and PSYCH 281 with a minimum grade of C in each; PSYCH 282; and successful completion of at least one of the following courses: PSYCH 335, 336, 337, 360, 375 and 380.	LEC	3	3
PSYCH	406	PSYCHOLOGY SEMINAR	Provides for an advanced consideration of significant topics in psychology. Requires in-depth analysis and discussions of current research. This course may be taken once to fulfill a requirement for the psychology major, and may be taken again with a different topic as an elective. Prerequisites: PSYCH 101, PSYCH 160, PSYCH 281 (all with a minimum grade of C), PSYCH 282; each specific seminar may have additional prerequisites depending on the topic.	SEM	3	3
PSYCH	466	INDEPEND STUDY PSYCH	Provides for the study of a topic via review and research of technical psychological literature and/or empirical manipulation of variables in the field or laboratory under supervision of a psychology faculty member. Successful completion includes a written paper. Independent Study in Psychology is offered for majors. Prerequisites: PSYCH 101, PSYCH 160, PSYCH 281 (with minimum of C in each), PSYCH 282, and consent of the instructor, the department and approval of the dean.	IND	3	3
PSYCH	476	PRIN BEHAVIOR MODIF	Examines the basic methods of behavior modification as they are used in individual therapy as well as in institutionalized settings. The course connects behavior modification techniques to the theoretical concepts that they are based on, especially: operant conditioning, respondent conditioning, observational learning, and cognitive models. Behavior Modification is a lecture-based course designed for psychology majors. Prerequisites: PSYCH.101, PSYCH.160, PSYCH.281 (minimum grade of C in each).	LEC	3	3

PSYCH	497	PSYCHOLOGY PRACTICUM	Applies psychological knowledge through study, observation, and practice in a community or university setting. Provides experience in a work setting in the field. Processing experiences through class discussions, writing assignments, and interactions with field supervisor. This course counts toward the psychology major and is one of the department's capstone experiences, aimed at upper-level students. Forty hours must be completed at placement site per credit hour during the course of the semester, including a weekly meeting with the site supervisor or their designee. Weekly 90-minute class meeting with faculty supervisor and peers in small groups. Prerequisites: 90 credit hours and completion of PSYCH.101, PSYCH.160, PSYCH.281 (minimum grade of C in each), PSYCH.282 and consent of the instructor.	SUP	3	15
READING	540	INTRO TCHG READ	Focuses on components of a balanced literacy program; designed to develop a knowledge base and instructional competence with literacy instruction for inclusive classrooms. Three hours lecture per week. This course satisfied PDE guidelines for Inclusive Classrooms/Standard Aligned System SAS. May be offered in traditional and distance education formats.	LEC	3	3
READING	545	ORG ADMIN RDG PROG	Focuses on instruction for classroom teachers, reading specialists, and special education specialists who are involved with a school districts' reading program; emphasizes a working knowledge of certification requirements, job descriptions, guidelines for programs funded through federal or state agencies, resources for exemplary programs, program evaluation, and parent involvement. May be offered in traditional and distance education formats.	LEC	3	3
READING	550	LIT, LITERACY & CULT	Explores the role of literature in improving students' reading, writing, and language growth in grades K-12. Focuses on the role of multicultural literature in promoting cross-cultural understandings in a student-centered language arts program. Specific topics include selecting quality literature, developing literature-based multicultural thematic units, organizing the classroom, implementing literature circles, second language acquisition, developing and implementing strategies to advocate for equity, and recognizing the influence of culture on literacy teaching and learning. This course is a requirement for the Masters of Reading (M.Ed.) program. Three hours lecture per week. This course satisfied PDE guidelines for Inclusive Classrooms/Standards Aligned System (SAS). Prerequisites: Graduate standing. May be offered in traditional and distance education formats.	LEC	3	3
RUSSIAN	101	RUSSIAN 1		LEC	3	3
RUSSIAN	102	RUSSIAN 2	Develops further the four language skills: speaking, listening, reading, and writing to a proficiency level regarded as basic communication in Russian. RUSSIAN.102 is for students who wish to continue studying Russian at the second level. Russian language study is taught in its cultural context, including history, culture, diversity, and comparison with students' native culture. Practice in language laboratory and/or use of electronic language-learning media is required. RUSSIAN.102 is offered every semester. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 8 Second Language in general education. Three hours lecture per week. Prerequisite: RUSSIAN.101 or equivalent proficiency level. This course is generally appropriate for students with one or two years of high-school Russian.	LEC	3	3

RUSSIAN	212	RUSS FILM LIT & CULT	Explores the role of cinema, literature, print and electronic media in shaping society in the Soviet Union and Russia. Along with learning about Soviet and Russian popular culture, students analyze the relationship between media and politics. Special attention will be paid to cinema, television, radio, newspapers, contemporary literary works, and the Internet. The course is designed for students seeking General Education Points in Arts and Humanities and communication and is taught in English in combination of lecture and discussion, and formal and informal oral and written assignments. Open to all students and applicable toward a minor or a major in Languages and Cultures: Russian and East European Studies Track. Normally offered every other year. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: None. Three hours lecture per week. Prerequisites: None.	LEC	3	3
SECED	452	TEACH MATH SEC SCH	Theory, research, trends, issues and techniques in the teaching of mathematics at the middle and high school levels. This course focuses on the teaching and preparing a mathematics curriculum for individuals to be certificated in middle school and high school mathematics. Prerequisite: Approved as BSED Major.	LEC	3	3
SECED	513	ADM LEADERSHIP IN ED	Focuses on theories of educational leadership; models of special education inclusionary practices; the role of the administrator as an instructional leader; and school effectiveness, accountability & improvement. The course is designed to help candidates meet the PDE requirements of "an instructional leader who focuses on teaching and learning." Three hours lecture per week.	LEC	3	3
SECED	530	FOUND TCHG	Introduces students to the teaching process. Diverse instructional strategies and techniques, methodologies, and approaches are explored. Topics include: (1) the manner in which personal characteristics, experience and preparation, context in teaching, the changes in society, and student diversity influence how we teach, (2) developing instructional objectives, sequencing learning activities, and applying various taxonomies while conducting microteaching lessons, and (3) discipline strategies, questioning techniques, differentiated learning activities, and mastery teaching. Class term project includes a research paper on alternate teaching methods, a unit plan, and evaluative instruments. Three hours lecture per week.	LEC	3	3
SECED	597	GRADUATE PRACTICUM	This is a six-credit, 16 week student teaching experience that is part of the secondary certification track of the curriculum and instruction master's program. It includes all of the required INTASC standards and the framework for teaching and learning now required by both the National Council of Accreditation of Teacher and the Pennsylvania Department of Education. Required for teacher certification.	FLD	6	6
SOC	211	PRIN SOCIOLOGY	Introduces the basic concepts, perspectives, theories, and methods in sociology. Required of all sociology majors and minors. Multiple sections offered every fall and spring semester. This course earns three GEPs toward Goal 6 Social Sciences in general education. Three hours of lecture per week. Open to all students. Prerequisites: None.	LEC	3	3
SOC	213	CONT SOCIAL PROBS	Defines what constitutes a social problem and examines the negative impacts of racism, poverty, sexism, crime and other social problems in contemporary American society. This class will be offered at least one time per year. This course earns three GEPs toward Goal 6 Social Sciences in general education. Prerequisites: None. Three hours lecture per week.	LEC	3	3

SOC	215	RACIAL & ETHNIC MIN	Provides an introduction to the sociological study of racial and ethnic minority groups and inter-group relations, particularly between minority and dominant groups. Covers concepts, theories and evidence for understanding the experiences of racial and ethnic minority groups and covers the history and current status of selected minority groups in the United States. Serves as a "Specialized Course" counting toward the major in Sociology, and counts toward the Sociology minor. Offered every fall and spring semester. Open to all students meeting the prerequisite. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisite: SOC.211. Three hours lecture per week.	LEC	3	3
SOC	217	SOCIOLOGY OF SPORTS	Examines and critically assesses the role of sports in American Society from a sociological standpoint. Specific attention is paid to the influences of race, class and gender upon sports. The violent, commercialized, corrupt and deviant dimensions of sports are also explored. This class is geared towards anyone with an interest in learning more about sports and human behavior. This class counts for three General Education Points in Goal 6 - Social Sciences. Prerequisites: None.	LEC	3	3
SOC	231	MARRIAGE & FAMILY	Introduces marriage and family as a social institution and how other social institutions and social structure affect marriage and family. This course also introduces how marriage and family affect other social institutions. This course covers diverse processes that form a family and diverse types of family and relating issues across different time periods and regions in the world. This course counts as a lower level elective in the sociology major and is an elective course for the Gerontology minor and Gender Studies minor. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 6 Social Sciences in general education. Prerequisites: None.	LEC	3	3
SOC	255	RES METHODS SOC INQ	Introduces students to social science research methods common in sociology and criminal justice. Finding, reviewing and critically evaluating research literature and exploring essential components in the design of ethical research projects are central. Quantitative techniques are emphasized but attention is given to other approaches as well (e.g., qualitative and evaluation research). Class time typically includes a mix of lecture, discussion, and/or in-class exercises. The course is required for sociology and criminal justice majors but is open to all students who have taken SOC 211 or CRIMJUST 101 and have an interest in social science research. Offered every fall and spring semester. This course earns one GEPs toward Goal 1 Communication and two GEPs toward Goal 2 Information Literacy in general education.	LEC	3	3
SOC	260	BASIC SOC STATISTICS	Introduces students to the logic of statistical inquiry in social science research. Students learn basic statistical concepts and techniques necessary to conduct quantitative research. The course is taught with lecture and in-class computation and involves learning to use statistical software. The course is required for sociology and criminal justice majors but is open to others that have taken SOC.255 or CRIMJUST.255 and have an interest in social science research. Offered every fall and spring semester. This course earns two GEPs toward Goal 3 Quantitative Reasoning in general education.	LEC	3	3
SOC	275	SOCIOLOGICAL THEORY	Examines classical social theory that significantly impacted the development of sociology as an academic discipline. Key figures like Emile Durkheim, Karl Marx, and Max Weber are studied closely, but others may receive attention as well. Explores the value of classical theories for illuminating aspects of modernization and contemporary social life. Shows the influence of classical theories on contemporary perspectives prominent in sociology. Typically taught with a mixture of lecture and discussion of primary source readings. Required for sociology majors but open to others interested in sociology that have taken SOC.211. Offered every fall and spring semester. Three hours lecture per week.	LEC	3	3

SOC	318	SOC STRATIFICATION	Examines the class structure of contemporary American society. Considers major theories of social class. Emphasis is on helping students recognize their own class background by primary assignments on topics such as sex roles, socialization, and family mobility that enable them to apply key concepts to their own biography. Mainly lecture but frequent discussions. Taught at least once per academic year. Three hours lecture per week. Prerequisites: SOC.211 and SOC.275 or consent of the instructor.	LEC	3	3
SOC	443	SOC DEVIANT BEHAVIOR	Assesses the process of creating deviance in society and consequences for various types of behavior construed as deviant. Class is lecture with much discussion around many topics. Students will become conversant in various theories and types of deviance that are present in contemporary society. Offered at least once per academic year. Three hours lecture per week. Prerequisite: SOC.211 and SOC.275 or consent of instructor.	LEC	3	3
SOC	457	SOC COMMUNITY LIFE	Reviews and examines theories and research of communities. Gives special emphasis to the American community. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: SOC.211.	LEC	3	3
SOC	465	COMP APPLIC SOC SCI	An introduction to computer use for the social sciences (through use of SPSS). Emphasizes translating questions into data analysis and interpretation of statistical results. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Prerequisites: SOC.260 or similar statistics course. Three hours lecture per week.	LEC	3	3
SOC	470	SENIOR SEMINAR	Provides students with the opportunity to participate in a seminar class that relates to an area of specialization that is not covered in other classes. Examples include the Sociology of Law, Music, Aging, Sports and Health Care. Primarily for sociology majors, but interested students meeting the pre-requisites may enroll. Taught as a seminar, i.e., a mixture of lecture, discussion and individualized instruction and consultation. Offered on an as needed basis. Pre-requisites include SOC.255, SOC.260 and SOC.275 and 60 credits or consent of instructor.	LEC	3	3
SOC	474	ENVIRONMENTAL SOC	Examines some major human problems that lead to environmental deterioration, particularly water, air and noise pollution, energy and other resource depletion and increasing population density. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: SOC.211.	LEC	3	3
SOC	496	INTERNSHIP PROGRAM	Provides students with supervised practice at an approved site. The internship exposes students to responsibilities, skills and activities in a variety of sociology related work environments. It further provides students with an opportunity to apply sociological knowledge and skills learned in the classroom. Prerequisites: 18 hours of coursework in sociology including SOC.211, SOC.255, SOC.260, and SOC.275, or consent of instructor. This is a variable 3-6 credits class. It is offered Pass/Fail only. Forty hours of on-site work required for each credit earned. Offered every fall, spring, and summer.	SUP	3	6
SOCWORK	133	INTRO SOC WORK & WEL	Provides students with an overview of the principles and concepts of the social welfare system in the United States as well as a survey of the social work profession. This foundational class has no prerequisites. It is required for students majoring in Social Work and is available to all students. Three hours of lecture per week. Offered each fall and spring semester. This course earns three GEPs toward Goal 6 Social Sciences in general education. Prerequisites: None.	LEC	3	3

SOCWORK	221	HUM BEHAV IN SOC EVR	Provides an understanding of how economic, environmental, and social forces interface with biological, cultural, psychological, and social characteristics of human beings alone and in families, groups, communities, and organizations. Explores the cultures, historical experience, and demographics of various oppressed groups in the United States over the life span. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: SOCWORK.133 (or permission of instructor).	LEC	3	3
SOCWORK	236	CHILD WELFARE	Utilizes an ecological systems perspective to prepare students for a career in child welfare and family services in the public or private sector. Competencies established by the state welfare agencies and schools of social work are addressed in this course. The course emphasizes a community based, family focused and child-centered model for helping families at risk. The course will include information regarding child welfare services including but not limited to family preservation, prevention, adoption, protective services and foster care and will further examine the interplay of policy and law as they affect practice and service delivery. Cultural competency and the historic values of the social work profession are highlighted. This class will be taught once a year Prerequisites: NONE	LEC	3	3
SOCWORK	250	RESEARCH SOC WORK	Prepares the BSW practitioner to understand the research process and to critique research. The student will be exposed to a variety of social research processes and methods, including single subject research, qualitative and quantitative methodologies, and program evaluation. Emphasis on understanding and applying social work values to research, on methods for evaluation of one's own practice, and the interface of research with successful social work practice. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: SOCWORK.133 - Intro to Social Work.	LEC	3	3
SOCWORK	297	INTRO PRACT EXP SWK	The primary goal of this course is to initiate the preparation of the baccalaureate generalist social worker with a foundation of social work knowledge, values, ethics and skills. The beginning integration of ecological systems theory into generalist social work practice occurs in this course. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: SOCWORK.133 (with grade of C or above). Grade of C or above required to apply to the Social Work major.	LEC	3	3
SOCWORK	334	SOC WRK PRAC:IND/FAM	Examines the knowledge, values, ethics and skills that comprise the core of professional generalist social work practice with client systems of various sizes. The focus includes the philosophical foundation of social work, self-awareness, values and ethics of the helping person, and the nature of professional relationship/client-worker partnership in the context of practice and human diverse populations. The complexity of social work practice from a systems/ecological perspective that is strengths based is presented. Students also acquire knowledge about the stages, activities and skills of problem solving practice, engagement, assessment, intervention, evaluation, and termination. Content on human behavior social environment, policy, and research is integrated in the course. This class will be taught every semester. Prerequisites: SOCWORK 297.	LEC	3	3

SOCWORK	450	SOC WORK PRAC:SM GRP	Focuses on developing group facilitators who possess an understanding of group theory and group dynamics as well as effective leadership skills. The content encompasses both task and treatment groups utilizing strengths based framework. Social work group facilitation is taught utilizing empirically-based theories and interventions, teaching students to engage, assess, intervene, and evaluate with small groups. Opportunities to apply social work knowledge, values, ethics, and skills to practice settings and situations with small groups will be provided. Students learn how to use research evidence to inform their practice and evaluate the effectiveness of group interventions. An emphasis is placed on understanding, affirming, respecting, and working with groups with diverse backgrounds. This class is typically taught twice a year.	LEC	3	3
SOCWORK	452	SOC WRK PRAC:ORG/COM	Examines the knowledge, values, ethics, and skills that comprise the core of professional generalist social work practice with the organizations and communities. The focus includes the philosophical foundation of social work, self awareness, values and ethics of the helping person, and the nature of professional relationship/client-worker partnership. The complexity of social work practice from a systems/ecological perspective that is strengths based is presented. Students also acquire knowledge about the stages, activities and skills of problem solving practice, engagement, assessment, intervention, evaluation, and termination. This class will be taught every semester. Prerequisites: SOCWORK 334 - Individuals and Families, SOCWORK 240 - Statistics for Social Work, SOCWORK 250 - Research Methods for Generalist Social Work Practice.	LEC	3	3
SOCWORK	453	SOC WEL POL & SERV	Examines various aspects of social welfare policy and services. The focus of this course includes the history, politics, economics, culture, and ethics of social policy as it relates to the social work profession and the social service delivery system. Utilizing critical thinking skills, students will engage in policy analysis to explore the reciprocal interconnectedness of policy, the social service delivery system and social work practice. Based on the information obtained through the exploration of a social issue, concern, policy or need, students will formulate a policy proposal and develop a method by which to advocate for the social well-being of others through their policy creation. Additionally, students will be asked to consider how to evaluate the implementation and outcome of their proposed policy. This class will typically be taught every semester. Prerequisites: SOCWORK 334 - Individuals and Families and POLISCI 120 - United States Government.	LEC	3	3
SOCWORK	497	SOCIAL WORK INTERN	Provides an educationally directed internship and is taken concurrently with SOCWORK 498 Integrative Senior Seminar under direct supervision of a professional social worker. In field education, students will engage in tasks and assignments that reflect a higher level of mastery of knowledge and increased independence in functioning in a chosen social service agency. This course provides skill development in direct engagement, assessment, intervention, evaluation and advocacy strategies for effective and ethical generalist social work practice with individuals, families, groups, communities and organizations. This class will be taught every semester.	SUP	10	12
SOCWORK	498	INT SENIOR SEM SWK	Integrates information from the overall social work curriculum in preparation for future work. This course processes and integrates theory and practice within the field education experience and incorporates practice-relevant research and assessment of student's own practice and interventions. The course will serve as additional support for students who may experience difficulty in field and who require additional supervision to comply with CSWE accreditation requirements. The course provides opportunities for students to develop and strengthen professional skills of collaboration, consultation, and problem solving. Workshops will be used to clarify expectations in the field and will provide a forum for student discussion and the reception of feedback from peers and faculty members. This class will be taught every semester and is taken concurrently with SOCWORK 497, Field Education. Prerequisites: SOCWORK 240, SOCWORK 250, SOCWORK 334, SOCWORK 450, SOCWORK 452 and SOCWORK 453	SEM	3	3

SPANISH	101	SPANISH 1	Initiates students' development of the four language skills (speaking, listening, reading, writing) required to use the Spanish language in a communicative context. Anticipated proficiency upon successful completion of the course is the Novice-Mid sub-level (based upon the American Council on the Teaching of Foreign Languages). Introduces students to features of Hispanic culture that are associated with the targeted communicative activities. Open to all students. Offered at least one time per year. May be offered in traditional and distance education formats. Three hours lecture per week.	LEC	3	3
SPANISH	102	SPANISH 2	Develops further the four principle language skills (speaking, listening, reading, and writing) to the level of basic second-language proficiency (the Novice-High proficiency level according to the guidelines of the American Council for the Teaching of Foreign Languages) and enhances students' knowledge of the cultures of the Spanish-speaking world. All course content is presented in communicative, culturally contextualized activities. Appropriate for students with one or two years of high school Spanish. Offered every semester. Counts toward the Spanish Minor. Offered as both traditional and distance education. Prerequisite: SPANISH.101 or equivalent proficiency level. Three hours lecture per week. This course earns one GEP toward Goal 4 Cultures and Diversity and two GEPs toward Goal 8 Second Language in general education.	LEC	3	3
SPANISH	203	SPANISH 3	Focuses upon the development of each of the four principal second language proficiencies (speaking, listening, writing, reading) at the Intermediate level of proficiency, according to the American Council on the Teaching of Foreign Languages. Also focuses on the development of an appreciation of noteworthy literary and artistic works of Latin America. Appropriate for all students who have satisfied the indicated prerequisites (Completion of Spanish 102 - Spanish 2 or placement via the Spanish Language Placement Test). Offered each semester.	LEC	3	3
SPANISH	204	SPANISH 4	Continues the development of the four principal second language proficiencies (speaking, listening, writing, reading) at the Intermediate level of proficiency according to the guidelines of the American Council on the Teaching of Foreign Languages. Also focuses on the development of an appreciation of noteworthy literary and artistic works of Spain. Appropriate for all students who have satisfied the indicated prerequisites - completion of Spanish 3 or placement via the Spanish Language Placement Test. Offered each semester.	LEC	3	3
SPANISH	206	STRUCT SPAN LANG	Study of Spanish grammar and syntax through applied exercises and introduction to Spanish morphology. This course counts as a Group A, Humanities and The Arts General Education Requirements. Not offered every semester. Three hours lecture per week. Prerequisite: SPANISH.204 or equivalent.	LEC	3	3
SPANISH	207	SPAN CONV COMP 1	Development of speaking and writing skills at the intermediate level; prepares students for transition to upper level language courses. This course counts as a Group A, Humanities and The Arts General Education Requirements. Not offered every semester. Three hours lecture per week. Prerequisite: SPANISH.204 or equivalent.	LEC	3	3
SPANISH	222	LAT. AMER CULT FILM	Offers students an opportunity to gain, through the study of film, meaningful insight to cultural and societal phenomena rooted in the persons and places of Latin America. A broad selection of topics will be addressed while viewing films from many countries and tracing important issues dating from the Spanish colonies through the present day. This course counts as a Group A, Humanities and The Arts General Education Requirements. This course is approved as a Diversity General Education Course. Three hours lecture per week. Course taught in English. Prerequisite: None.	LEC	3	3

SPANISH	305	SPAN APP PHONE PRON	Develops ability to communicate effectively in spoken Spanish. Provides a detailed study of Spanish sound and intonation patterns through group and individual practice. Attends to individual pronunciation problems. This course counts as a Group A, Humanities and The Arts General Education Requirements. Not offered every semester. Prerequisite: SPANISH.206 or equivalent.	LEC	3	3
SPANISH	306	CONVERS & COMP 2	Continued development of speaking and writing skills (see SPANISH.207); required before advancing to advanced language courses. This course counts as a Group A, Humanities and The Arts General Education Requirements. Not offered every semester. Three hours lecture per week. Prerequisite: SPANISH.206 and SPANISH.207, or consent of instructor.	LEC	3	3
SPANISH	390	INTERNSHIP IN SPAN	Students apply the theory learned in the classroom to situations occurring in the workplace. Careful planning with the department's internship coordinator enables the students to schedule these experiences to complement their academic program. Participation in the university's internship adds an important dimension to student's educational experience and future career plans. Prerequisites: SPANISH.204 or Permission of Instructor.	SUP	3	9
SPANISH	402	ADV CONV CAMP	Develops spoken and written communication in Spanish at the advanced level according to the standards of the American Council on the Teaching of Foreign Languages. Emphasizes speaking and writing on topics of current cultural and social significance in order to develop and to stimulate sophisticated oral and written communication in Spanish and to promote heightened awareness and appreciation of the cultural contexts in which the Spanish language is spoken. All resources are culled from authentic language sources intended for native or near-native speakers of the Spanish language. Delivered in Spanish. Intended for students of intermediate to advanced levels of language ability. Required for Languages and Cultures I Spanish majors. Three hours lecture per week. This course earns one GEP toward Goal 1 Communication and one GEP toward Goal 4 Cultures and Diversity in general education. Prerequisite: SPANISH 306 or SPANISH 350 or permission of the instructor. Offered at least once each academic year.	LEC	3	3
SPECED	100	ORIENTATION SPEC ED	Introduces freshman and transfer students to the Special Education (PK-8)/Early Childhood Education (PK-4) Dual Certification Program (PTE status). The content focuses on all requirements associated with the scope and sequence for successful program matriculation. The purpose of the course is to facilitate successful transition of students into this course of study within teacher education (special education) as well as provide an orientation to professional expectations associated with course work leading to a degree in the field. Classes are held weekly for the entire semester. Prerequisites: Admission in the Special Education Program (PTE status).	LEC	1	1
SPECED	101	INTRO INDIV W/EXCEPT	Reviews all major areas of exceptionality (visually impairments, intellectual disability, hearing impairments, communication disorders, behavior disorders, learning disabilities, etc.) and acquaints the student with social, sociological, psychological, medical, historical, legal, economic and professional aspects of these conditions. Reviews current research and the latest techniques for facilitating meaningful interactions with individuals with disabilities. This course earns two GEPs towards Goal 4 Cultures and Diversity and one GEP towards Goal 10 Responsible Citizenship in general education. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisites: None.	LEC	3	3

SPECED	202	TECH INDIV W/DISAB	Introduces students to assistive technology and the existing and emerging technologies that are being used by various professionals working with individuals that have disabilities. The focus of this course is to prepare students for pk-12 Special Education Teacher Certification. Students use computers, assistive devices, educational software and other technologies utilized as instructional tools, administrative tools, and environmental interfaces. This course earns one GEP towards Goal 2 Information Literacy and one GEP towards Goal 4 Cultures and Diversity in general education. Three hours lecture per week. Prerequisites: None.	LEC	3	3
SPECED	206	INTRO EARLY INTERVEN	An overview of the field of early intervention (EI), including historical perspectives, philosophies of EI, influences of disabilities on the development of young children, early intervention models and intervention strategies. Three hours lecture per week.	LEC	3	3
SPECED	275	LINKING ASSESS/INSTR	Provides teacher candidates with a comprehensive overview of the skills, processes, and research-based interventions for linking assessment and instruction in inclusive settings for students with disabilities. The academic core areas to be addressed in this course will include literacy, math, and writing in P-12 setting. This course earns one GEP toward Goal 2 Information Literacy, one GEP toward Goal 3 Quantitative Reasoning and one GEP toward Goal 6 Social Sciences in general education. May be offered in traditional and distance education formats. Three hours lecture per week. Prerequisite: SPECED.101.	LEC	3	3
SPECED	358	METH INSTR INDIV DIS	This course deals with the development of evidenced based skills in effective instructional strategies for students with exceptionalities, creating positive classroom learning environments, and teacher-candidate development of effective collaboration and communication skills. Three hours lecture per week. Prerequisite: SPECED.101.	LEC	3	3
SPECED	417	BEHAVIOR INT/SUP	Develops skills and competencies in applying the principles of human behavior, group management procedures, and design/implementation of person (student) centered behavior support plans as delineated under the Individuals with Disabilities Act (IDEA) and the Americans with Disabilities Act (ADA). This course examines the relationship among research, policy and practice as it pertains to prevention and early intervention with group and individual problems at school and community levels. Three hours lecture per week. Prerequisites: SPECED.358; Admission to Teacher Education.	LEC	3	3
SPECED	430	INSTR PRAC MOD/SEV	This course presents an overview of the nature and needs of educating individuals with moderate and severe disabilities. Models, theories, and effective strategies for individual assessment and planning, cognitive, functional and social development in a standard aligned system, and research-based instructional methods are provided. The content focuses on the dynamics of including diverse learners in the home, school, general education classroom and community. This course provides students with an opportunity to apply knowledge through a field-based experience. Three hours lecture per week. Prerequisites: SPECED.358.	LEC	3	3
SPECED	433	LIT INSTR ST W/DIS	Provides preservice teachers with a comprehensive overview of skills, assessment and strategies for teaching listening, speaking, reading and written expression. Students will prepare a portfolio of resources and best practices for teaching language arts to students with special needs. Three credits completed in general reading instruction; Admission to Teacher Education. Three hours lecture per week.	LEC	3	3

SPECED	449	ACAD ASSESS INSTR	Develops skills and competencies in using formal and informal assessment tools and procedures that are in compliance with professional standards of ethical practice. Covers strategies and methods for gathering information about the learner prior to, during, and after instruction to maximize instructional effectiveness. Presents strategies and formats for synthesizing assessment results and developing evaluation reports and IEP goals. Three hours lecture per week. Prerequisites: SPECED.275 and Admission to Teacher Education.	LEC	3	3
SPECED	450	INSTR PRAC MILD PK-8	This course focuses on the recognition and acquisition of learning characteristics and theory, effective teaching and classroom management strategies, as well as the understanding of collaborative roles and responsibilities of professionals in identifying, assessing and providing services to meet the instructional needs of students with disabilities. Three hours lecture per week. Prerequisites: SPECED.358 and Admission to Teacher Education.	LEC	3	3
SPECED	461	ST SEMINAR	Presents instruction in the development of effective teaching individuals with exceptionalities. Focuses on problems in the education of this population. Discusses its relationship to teaching as each problem is defined. Helps the future teacher meet practical problems in guiding the individual with exceptionalities in learning experiences at school. Three hours lecture per week. Prerequisite: Concurrent with SPECED.488/499.	SEM	3	3
SPECED	488	STUDENT TEACHING I	The student teaching semester requires two placements of eight to nine weeks in duration. One placement will be in a full-time, part-time or inclusionary setting with students with exceptionalities (PK-8). The other placement will be in a regular education class (K-6). Student teachers are responsible for demonstrating competence in the following areas: planning and preparation, classroom environment, instructional delivery, professionalism, and clerical task completion. The student teachers will systematically assume the role of each cooperating teacher. Prerequisites: Concurrent with SPECED.461; student teaching seminar.	FLD	6	6
SPECED	489	STUDENT TEACHING II	The student teaching semester requires two placements of eight to nine weeks in duration. One placement will be in a full-time, part-time or inclusionary setting with students with exceptionalities (PK-8). The other placement will be in a regular education class (K-6). Student teachers are responsible for demonstrating competence in the following areas: planning and preparation, classroom environment, instructional delivery, professionalism, and clerical task completion. The student teachers will systematically assume the role of each cooperating teacher. Prerequisites: Concurrent with SPECED.461; student teaching seminar.	FLD	6	6
SPECED	501	ADM & SUP SPEC EDUC	Examine the functions and responsibilities of the Administrator of Special Education. This includes functions in the areas of leadership, guidance, control, direction and management of special education programs and services within educational organizations. Understanding administrative theory and its application to current issues within the domain of special education will provide a framework for this course. Key programming areas of curricular content knowledge, collaboration, research and inquiry, professional and ethical practice, and leadership and policy will be addressed. Prerequisites: Admission to Graduate Program.	LEC	3	3
SPECED	506	INTRO EARLY INTERVEN	Presents an overview of the field of early intervention, including historical perspectives, philosophies of early intervention, influences of disabilities on the development of young children and early intervention models. Three hours lecture per week.	LEC	3	3

SPECED	516	ORIENT EXCEPTIONAL	Provides an overview of exceptionalities and acquaints the student with historical foundations, research, service models, theories, legislation and philosophies that form the basis of special education practice. Educational rights, characteristics, assessment procedures, and evidence-based instructional practices are reviewed. Students will explore the development of an ethical framework for serving and valuing students with disabilities and their families. Three hours lecture per week.	LEC	3	3
SPECED	517	BEHAVIOR INT/SUP	Develops skills and competencies in applying the principles of human behavior, group management procedures, and design/implementation of person (student)centered behavior support plans as delineated under the Individuals with Disabilities Act (IDEA) and the Americans with Disabilities Act (ADA). This course examines the relationship among research, policy and practice as it pertains to prevention and early intervention with group and individual problems at school and community levels. Prerequisites: SPECED.558; Admission to Graduate Program. Three hours lecture per week.	LEC	3	3
SPECED	530	INSTR PRAC MOD/SEV	Presents an overview of the nature and needs of educating individuals with moderate and severe disabilities. Models, theories, and effective strategies for individual assessment and planning, cognitive, functional and social development in a standard aligned system, and research-based instructional methods are provided. The content focuses on the dynamics of including diverse learners in the home, school, general education classroom and community. This course provides students with an opportunity to apply knowledge through a field-based experience. Three hours lecture per week. Prerequisites: SPECED.358. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	LEC	3	3
SPECED	533	LIT INSTR ST W/DIS	Literacy Instruction for Students with Disabilities will provide teacher candidates with comprehensive, evidence-based literacy strategies and methodologies in alignment with Pennsylvania Standards-Based Instructional System. Emphasis will be on teaching reading, writing, listening and speaking. Students will examine and utilize systematic approaches for teaching literacy to students with disabilities. Students will prepare a portfolio of resources and evidence-based practices. Admission to Teacher Education. Three hours lecture per week. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	LEC	3	3
SPECED	544	ACAD ASSESS INSTRU	Develops skills and competencies in using formal and informal assessment tools and procedures that are in compliance with professional standards of ethical practice. Covers strategies and methods for gathering information about the learner prior to, during, and after instruction to maximize instructional effectiveness. Presents strategies and formats for synthesizing assessment results and developing evaluation reports and IEPs. Three hours lecture per week. Prerequisites: SPECED.557 and Admission to Graduate Program.	LEC	3	3
SPECED	547	TECH APP FOR DIS	Introduces students to assistive technology and the existing and emerging technologies that are being used by various professionals working with individuals that have disabilities. The focus of this course is to prepare students for pk-12 Special Education Teacher Certification. Students use computers, assistive devices, educational software and other technologies utilized as instructional tools, administrative tools, and environmental interfaces. Three hours lecture per week. Prerequisites: None.	LEC	3	3
SPECED	550	INSTR PRAC MILD PK-8	This course focuses on the recognition and acquisition of learning characteristics and theory, effective teaching and classroom management strategies, as well as the understanding of collaborative roles and responsibilities of professionals in identifying, assessing and providing services to meet the instructional needs of students with disabilities. Prerequisites: Admission to Teacher Education. Three hours lecture per week. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	LEC	3	3

SPECED	557	LINKING INSTR/ASSESS	Provides teacher candidates with a comprehensive overview of the skills, processes, and research-based interventions for linking assessment and instruction in inclusive settings for students with disabilities. The academic core areas to be addressed in this course will include literacy, math, and writing in P-12 setting. This course satisfied PDE guidelines for Inclusive Classrooms/SAS. May be offered in traditional and distance education formats. Three hours lecture per week.	LEC	3	3
SPECED	561	ST SEMINAR	Presents instruction in the development of effective teaching individuals with exceptionalities. Focuses on problems in the education of this population. Discusses its relationship to teaching as each problem is defined. Helps the future teacher meet practical problems in guiding the individual with exceptionalities in learning experiences at school. Three hours lecture per week. Prerequisite: Concurrent with SPECED.509.	SEM	3	3
SPECED	567	SPEC ED RESEARC II	Applies statistical and educational research methods learned within Special Education Research Methods I. This course assists the graduate student in planning, implementation, and evaluation of applied research in special education. The course emphasizes research techniques, IRB procedures, and development of research questions and design through the completion and evaluation of a departmental paper or master's thesis. Prerequisites: SPECED.565. Three hours lecture per week.	LEC	3	3
SPECED	588	STUDENT TEACHING I	The student teaching semester requires two placements of eight to nine weeks in duration. One placement will be in a full-time, part-time or inclusionary setting with students with exceptionalities (PK-8). The other placement will be in a regular education class (K-6). Student teachers are responsible for demonstrating competence in the following areas: planning and preparation, classroom environment, instructional delivery, professionalism, and clerical task completion. The student teachers will systematically assume the role of each cooperating teacher. Prerequisites: Concurrent with SPECED.561; Student Teaching Seminar..	FLD	5	5
SPECED	589	STUDENT TEACHING II	The student teaching semester requires two placements of eight to nine weeks in duration. One placement will be in a full-time, part-time or inclusionary setting with students with exceptionalities (PK-8). The other placement will be in a regular education class (K-6). Student teachers are responsible for demonstrating competence in the following areas: planning and preparation, classroom environment, instructional delivery, professionalism, and clerical task completion. The student teachers will systematically assume the role of each cooperating teacher. Prerequisites: Concurrent with SPECED.561; Student Teaching Seminar.	FLD	5	5
SPECED	591	PRACTICUM SPECIAL ED	Provides graduate students with the opportunity to apply knowledge, skills and dispositions gained through their experiences and course work in Special Education in educational settings. During this practicum, graduate students focus on analyzing pedagogical competencies and professional standards to enhance skills and strategies related to teaching and learning. Graduate students spend a minimum of 120 hours in an educational setting and meet regularly with their university supervisor to reflect upon their experiences, their professional development and strategies related to teaching and learning. Three hours lecture per week. May be offered in traditional and distance education formats. Prerequisites: Admission to Graduate Program; Completion of a minimum of 21 graduate credits.	CLN	3	3
SPECED	595	INTERNSHIP	Internship in special education. Supervision to take place in schools or educational situations under supervision of the local supervisor and graduate faculty. This course satisfied PDE guidelines for Inclusive Classrooms/SAS.	SUP	3	6

SPECED	99	CO-CURRICULAR	Student CEC, Best Buddies and Trinity Learning Community - Provides an opportunity for students to partially fulfill program service requirements, become immersed in direct service experiences with individuals with disabilities and to further skills in citizenship. Offered during the fall and spring semesters during the academic year. This course earns one GEP toward Goal 10 Citizenship in general education for student engagement in either Student CEC, Trinity Learning Community or Best Buddies. Prerequisites: Open only to Special Education (PK-8)/Early Childhood (PK-4) Dual Teacher Certification Majors.	ACT	0	0
THEATRE	100	THEATRE FORUM	Requires all tracks of the Bachelor of Arts in Theatre to attend weekly performance labs, including specialized workshops, lectures, readings, and performances. May be repeated each semester.	LAB	0	0
THEATRE	102	INTRO TO THEATRE	Students explore various aspects of the theatrical process and learn tools for evaluating theatrical productions in a hands-on class. Both group and individual projects are used to introduce and deepen understanding of several theatrical disciplines (playwriting, directing, performance, design) and varied genres and styles of theatre. Students also see and critique performances on and off campus. Open to all students; required for all Theatre majors. This course earns three GEPs toward Goal 7 - Arts and Humanities in general education. Prerequisites: None.	LEC	3	3
THEATRE	103	THEATRE APPRECIATION	Students will explore the fundamental relationship between theatre and empathy; examining how theatre invites audiences to learn about other people's perspectives and actions. The course introduces the terminology, process, genres, and basic techniques of theatrical production; students will learn about a variety of theatre artists and companies. This course uses a flipped class model: in-person class meetings focus on demonstration and discussion; homework topics are explored through recorded lectures, recorded theatrical productions, readings, and videos about theatre. Attendance at live theatrical events is required. Open to students in all majors. This course earns three GEPs towards Goal 7 - Arts & Humanities in general education. Prerequisites: None.	LEC	3	3
THEATRE	108	THEATRE PRACTICUM	Involves participation in plays: Acting or technical Work. Grade awarded each semester. May be repeated. Prerequisites: None.	ACT	0	1
THEATRE	112	FUND OF ACTING	Student actors explore the terms and techniques of acting in an active, hands-on learning environment. Students perform improvised and scripted scenes and monologues, as well as other individual, paired and group acting exercises. Students see and critique acting in performances on and off-campus. Open to all students; required for all Theatre majors. This course earns three GEPs toward Goal 7 - Arts and Humanities in general education. Prerequisites: None.	LEC	3	3
THEATRE	321	THEATRE & STAGE MGT	Prepares students for professionalism in production of plays and the management of a theater company. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	SEM	3	3
THEATRE	325	THEATRE HISTORY 2	Provides an intensive examination of structure, production practices, plays and the theater's function in societies from the Renaissance to the mid 19th century. Required course for theater majors as well as a course for others interested in the art form of the theater and its history. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: THEATRE.215. Three hours lecture per week.	LEC	3	3

THEATRE	370	STAGE MAKEUP	Studio course covering aspects of stage makeup from basic modeling with paint to creating complex characterizations. Provides a basic working knowledge of the design and application of makeup for the stage. For theater majors and other interested students. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisite: THEATRE.270. Three hours lecture per week.	LEC	3	3
THEATRE	377	COSTUME DESIGN	The study and application of costume design for the theater including methods, tools, materials and visual concepts. This course counts as a Group A, Humanities and The Arts General Education Requirements. Three hours lecture per week.	LEC	3	3
THEATRE	412	ADVANCED ACTING	Character analysis based on scriptwork. Students begin to focus on particular areas of development. This course counts as a Group A, Humanities and The Arts General Education Requirements. Prerequisites THEATRE.112, THEATRE.312. Three hours lecture per week.	SEM	3	3
THEATRE	491	SEM IN TECH & DESIGN	Provides opportunities for advanced studies and application of special topics as in theatrical design and technical theatre. Examples might include advanced studies in Lighting, Costume or Scene Design or Technical Theater Management. With division approval, this course may substitute for one-semester enrollment in Theatre 108, Theatre Practicum. This course counts as a Group A, Humanities and The Arts General Education Requirements. May be repeated for credit without limit. Concurrent registration in multiple sections within a semester permitted. Prerequisites: THEATRE.270 and one other design or technical course and permission of the instructor. Three hours lecture per week.	SEM	3	3
THEATRE	492	SEM IN PERFORMANCE	Provides opportunities for advance studies and application of special topics as selected by the instructor. Examples might include advanced studies in audition techniques, acting styles or performance theory. This course counts as a Group A, Humanities and The Arts General Education Requirements. May be repeated for credit without limit. Concurrent registration in multiple sections within a semester permitted. Prerequisites: THEATRE.112 and THEATRE.312 and permission of the instructor. Three hours lecture per week.	SEM	3	3