

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	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	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	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	358	MANAGERIAL REPORTING	Continuation of ACCT.348, concentrating on management accounting issues, including standard costs and budgets. Emphasis on case studies used to analyze and interpret cost data. Intended primarily for accounting majors. Three hours lecture per week. Prerequisite: ACCT.348	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	TOPICS IN FIN REPORT	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	442	AUD THEORY & PROCED	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	510	ADVANCED AIS	Examines the design and analysis of accounting information systems and the tools and techniques utilized to support the business environment. May be offered in traditional and distance education formats. Prerequisites: Graduate Standing.	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

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	250	NEANDERTHALS	Explores the origin and fate of the prehistoric population called Neanderthals. It will explore the historical and social foundations of the Neanderthal debate and show how this debate is relevant to our understanding of human biological, behavioral, and cultural differences. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: None.	LEC	3	3
ANTHRO	300	ARCHAEOL METH & THRY	Explores the modern theoretical foundations of archaeology. Students read and discuss original contributions to the field and learn methods in preparation for actual fieldwork. This course counts as a Group B, Social & Behavioral Sciences General Education Requirements. Three hours lecture per week. Prerequisite: ANTHRO.210 or consent of the instructor.	LEC	3	3

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
ARABIC	101	ARABIC I	Seeks to develop novice proficiency with emphasis on intercultural communication in the context of the Arabic world. Language laboratory activities required. 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. Prerequisites: None.	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
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	331	US MIL SCI & HIST	Examines the military heritage of the United States from the colonial period to the late twentieth century. The goal of the course is to develop students' awareness of the relationship of the U.S. military establishment to American society. Further, the course will focus on the evolution of war and strategy and in the progression of military professionalism, with an emphasis of the history and purpose of joint operations, and discuss the role of history and heritage in understanding the Army profession. This is a required course for all cadets seeking a commission. Prerequisites: ARMY 110 - Intro Milit Science & ARMY 120 - Intro to Mil Issues - or Instructor permission.	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	105	ART THROUGH CINEMA	Examines art in global contexts and its depiction in cinema and provides cross-cultural and chronological comparisons. The course explores cultural, political, and social settings in fine art, as well as cinematic dramatization in movies that feature artists and artistic movements. Lecture/discussion. Open to majors and non-majors. Typically offered in the spring semester. There are no prerequisites for this course.	LEC	3	3
ARTHSTRY	236	REN TO CONTEMP 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	345	ISLAMIC ART	Examines the formation and development of art and architecture in lands dominated by Islam. The course explores cultural and political settings as well as themes that unify the diverse artistic styles of Islamic art. Lecture/discussion. Open to majors and non-majors. Typically offered in the fall semester. There are no prerequisites for this course. Prerequisite: 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	370	HIST GRAPHIC DESIGN	Provides historical analyses of visual communication with emphasis on the development of graphic design and its relationship with commerce and technology. The format is lecture and discussion. Prerequisites: None. Three hours lecture per week. Open to majors and non-majors. Offered at least once a year.	LEC	3	3
ARTHSTRY	376	SP TOPICS/ART HIST	Provides focused examination of selected topics in art history. The course's reading assignments, deployment of art historical terms, and analysis of works of art with respect to their historical and cultural contexts are aimed at analyzing and understanding various artistic traditions. Lecture/discussion. Open to majors and non-majors. Three hours lecture per week. Prerequisites: None. This course earns three GEPs toward Goal 7 Arts and Humanities in general education.	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	153	ARTSTDIO FOUNDATIONS	Introduces visual communication, the elements and principles of design, and safe art studio practices through exploration of varied 2-dimensional, 3-dimensional and time-based media. Artistic expression and varied critical strategies are studied in contemporary and historical contexts including nonwestern contexts. Sessions include extended work with materials, individualized instruction, critique, demonstrations, and lecture. This course meets 5 hours per week. Homework assignments require 4-5 hours each week outside of class. Students are responsible for purchasing some materials for projects. Prerequisites: None.	LAB	3	3
ARTSTDIO	212	INTERM 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. Learn color drawing methods, work with combinations of media, and create large-scale works. Locate and develop personal imagery and formal strategies. Studio sessions include extended work with drawing materials, individual instruction and group critique, demonstrations, and lecture. Intermediate Drawing serves as a requirement for Art Studio majors concentrating in Drawing and as a second level art studio course option for Art Studio minors. This course meets five hours per week. Prerequisite: ARTSTDIO.111.	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	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 PAINTING	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	245	SCULPT: MIXED-MEDIA	Explores the use of alternative materials, assemblage, new technologies, and safe studio practices. Contemporary sculpture involves the language of materials, and how by putting one object next to another meaning is created. The class will include but is not limited to, carving techniques, various ways of fastening materials, the incorporation of found objects, nontraditional materials, patination, creating inflatable sculptures and use of new media including video, sound and motion. Studio sessions include technical instruction, studio work time, and development of concepts through research, class discussion, group critique and lecture. This course serves as an interdisciplinary requirement for Art Studio majors and as an introduction to creative work and visual argument for non-majors. Students can expect to purchase materials for individual assignments as well as personal protective equipment. This course earns one GEP toward Goal 1 Communication and two GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: None. This course meets five hours per week.	LAB	3	3
ARTSTDIO	246	SCULPT: NEW TECH	Explores the use of new techniques and technologies in the production of three-dimensional objects, by investigating the intersection of digital media, sculpture, and design. Includes, but it no limited to, the use of computer technology such as 3D printing, laser cutting, video production and sound incorporated into physical environments, as well as environmental graphics/installations. Studio sessions include technical instruction, studio work time, and development of concepts through research, class discussion, group critique, and lecture. This course serves as an interdisciplinary requirement for Art Studio majors, and as an introduction to creative work and visual argument for non-majors. Students can expect to purchase materials for individual assignments, as well as personal protective equipment. This course fulfills Goal 1 - Communication (1 GEP) and Goal 7 - Arts and Humanities (2 GEPs) General Education Goals. Meets five hours per week. Prerequisites: None.	LEC	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	PRINTMAKING: ETCHING	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	DIGITAL 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	DARKROOM PHOTOGRAPHY	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	295	INTRO GRAPHIC DESIGN	Introduces formal design standards and principles using current industry software applications. Emphasizes critical thinking, creative problem solving, communication strategies, copyright standards, experimentation, and personal expression. Studio sessions include demonstration, lecture, critique, individual instruction, and extended work sessions. Introductory Graphic Design serves as an interdisciplinary requirement for all 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, one GEP toward Goal 2 - Information Literacy, and one GEP toward Goal 7 - Arts and Humanities in general education. There are no prerequisites. This course meets five hours per week. Prerequisites: NONE	LAB	3	3
ARTSTDIO	296	TYPE & LOGO DESIGN	Expands the skills and knowledge acquired in Introductory Graphic Design with additional emphasis on typography and logo design. Critical thinking skills, creative problem solving, communication strategy, interpersonal skills, and visual literacy are emphasized using digital applications and typography to create sophisticated graphics such as logo design, page layout and brand identity for Intermediate level students. Formal design standards and theory are emphasized. Studio sessions include demonstration, lecture, critique, individual instruction, and extended work sessions. Typography and Logo Design serves as an intermediate requirement for Art Studio majors concentrating in Graphic Design and an introduction to creative work and visual argument for non-majors. This course earns one GEP toward Goal - Communication, one GEP toward Goal 2 - Information Literacy and one GEP toward Goal 7 - Arts and Humanities in general education. This course meets five hours per week. This course can be repeated one time for credit, if course was originally taken prior to Fall 2019. Prerequisites: ARTSTDIO 295 - Introductory Graphic Design or ARTSTDIO 291 - Introduction to Digital Art.	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	400	ART STUDIO CAPSTONE	Provides a culminating experience for all Art Studio majors. Students will develop a final project in consultation with their supervising faculty, create an exhibition of their work, and prepare and give a presentation about their artwork. Students will enhance proficiency in professional practices such as portfolio preparation, writing, critical assessment, and career development. Students are responsible for purchasing some materials for projects. Prerequisites: Senior Status as an Art Studio Major or Permission of Instructor.	LAB	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	240	VISUAL GESTURAL	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	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	327	AMER SIGN LANG 4	Builds upon the content of ASL III with a focus on more advanced linguistic aspects of American Sign Language and syntheses of all concepts previously learned. Students learn to communicate and carry on a conversation with Deaf people. This course includes ASL vocabulary, grammatical structures and conversational behaviors. Special emphasis will be placed on the cultural values and beliefs shared by the Deaf Community. This class is conducted in ASL only. Prerequisite: ASLTERP 257 (American Sign Language III).	LEC	3	3
ASLTERP	330	DEAF CULTURE	Introduces the unique aspects of Deaf Culture and Deaf Community within the context of human and cultural diversity. This course presents an in-depth discussion of historical, cultural, linguistic, political, and geographical aspects of the Deaf Community as well as identifies diversity of ideas and practices in society and its influence on society. This course earns three GEPs toward Goal 4 Cultures and Diversity in general education. May be offered in traditional or distance education formats. Prerequisites: None.	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	359	ASLTERP VI	Involves a study of vocabulary, grammar, fingerspelling, based on working in specific settings and with specific Deaf populations. It also includes history of American Sign Language and its recognition as a language. The major focus will be the demonstration of advanced expressive and receptive conversational American Sign Language skills. Prerequisites: ASLTERP.358.	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	DEAF-BLIND	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	375	ASL LIT	Introduces the students to: American Sign Language literature as recorded on videotape or film and in live performance; art, traditional folklore, storytelling, poetry, drama, oratory, jokes, and nonfiction narrative; analysis of genres in their social and cultural contexts as expressions of Deaf identity and the Deaf experience; how historical and current issues in Deaf culture are represented in literary form. Field experiences may be required for this course. This course earns three GEPs toward Goal 7 Arts and Humanities in general education. Prerequisites: ASLTERP.327 and ASLTERP.330.	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
ASLTERP	480	PRACTICUM	Provides interpreting students the opportunity to apply knowledge, skills and dispositions gained through an interpreting placement with an experienced, certified interpreter mentor. The certified interpreter mentor will provide feedback and professional guidance to the interpreting student while getting hands on experience interpreting in the field. May be offered in traditional and distance education formats. Prerequisites: ASLTERP.460.	CLN	3	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	103	BIODIVERSITY CONSERV	Presents scientific and societal perspectives of the current global mass extinction and loss of biodiversity. Also, this course introduces the field of conservation biology, a discipline dedicated to conserving all levels of biodiversity for both human and non-human benefit. This course will explore patterns of past and current biodiversity, processes that produce biodiversity and the processes that lead to natural and anthropogenic extinction events. This course is a general education course open to all students and earns two GEPs toward Goal 5 Natural Sciences and one GEP toward Goal 10 Citizenship in general education. Prerequisite: none. Three hours of lecture/discussion per week. Not offered every semester.	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	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	303	HEALTH SCI SEMINAR	Presents issues, policies, procedures, and considerations in a variety of health science fields. This course introduces students to standard procedures regarding the ethical use, distribution, and communication of protected and confidential information. Students will learn about centralized application procedures and prepare application materials. This is an undergraduate course required for B.S. Health Sciences majors (except MLS option) and serves as a free elective for B.S. Biology Pre-med majors. One hour of lecture/discussion per week. Prerequisites: BS Health Sciences Major or BS Biology Pre-Med Major and completion of 60 credits.	LEC	1	1
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	342	MEDICAL MICROBIOLOGY	Studies microorganism and acellular entities capable of causing disease in humans. The course emphasizes epidemiology, laboratory diagnosis, principles of pathogenesis, treatment, and prevention. This is an elective course for Biology and Health Sciences majors. Prerequisites: BIOLOGY 242 (Microbiology) and BIOLOGY 271 (Cell Biology). Two hours of lecture and three hours of laboratory/discussion per week. Laboratory hours may vary. Not offered every semester.	LAB	3	3
BIOLOGY	342	MEDICAL MICROBIOLOGY	Studies microorganism and acellular entities capable of causing disease in humans. The course emphasizes epidemiology, laboratory diagnosis, principles of pathogenesis, treatment, and prevention. This is an elective course for Biology and Health Sciences majors. Prerequisites: BIOLOGY 242 (Microbiology) and BIOLOGY 271 (Cell Biology). Two hours of lecture and three hours of laboratory/discussion per week. Laboratory hours may vary. Not offered every semester.	LEC	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.	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	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	442	VIROLOGY	Examines the common strategies viruses employ to infect diverse hosts as well as the unique characteristics of viral pathogenesis in the human host. Topics will include the origin and nature of viruses, how viruses are classified, the molecular events in the infection and replication of viruses in eukaryotic cells, how viruses cause disease in humans, the host response to virus infection, and the spread and control of viruses infecting humans. Prions and other subviral agents will also be discussed. This is an elective course for Biology and Health Sciences majors. Prerequisites: BIOLOGY 242 (Microbiology) and BIOLOGY 271 (Cell Biology). Three hours lecture and discussion 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	473	CANCER BIOLOGY	Explores the fundamentals of cancer development and progression. Topics include cancer cell proliferation, growth factors and the cell cycle, apoptosis and cell survival, DNA damage and repair, oncogenes, tumor suppressor genes, and genetic and epigenetic changes that lead to tumor formation. Additionally, tumor-host interactions including tumor neovascularization, invasion and metastasis, the tumor microenvironment, and tumor immunology will be covered. Lastly, this course will explore the histopathology, screening, diagnosis and therapeutic treatments currently available to cancer patients. This course is an elective for those majoring in Biological and Health Sciences; it is open to other students meeting the requisites. Three hours of lecture/discussion per week. Not offered every semester. Prerequisites: BIOLOGY.271 and CHEM.230 or CHEM.231 or permission of instructor.	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	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	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	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	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	542	VIROLOGY	Examines the common strategies viruses employ to infect diverse hosts as well as the unique characteristics of viral pathogenesis in the human host. Topics will include the nature of viruses, how viruses are classified, the molecular events in the infection and replication of viruses in eukaryotic cells, how viruses cause disease in humans, the host response to virus infection, and the spread and control of viruses infecting humans. Viruses infecting other organisms, including insects and plants will be examined. Prions and other subviral agents will also be discussed. This is a graduate-level course. Prerequisite: Admission to the M.S. program in biology. Three hours lecture and discussion 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	573	CANCER BIOLOGY	Explores the fundamentals of cancer development and progression. Topics include cancer cell proliferation, growth factors and the cell cycle, apoptosis and cell survival, DNA damage and repair, oncogenes, tumor suppressor genes, and genetic and epigenetic changes that lead to tumor formation. Additionally, tumor-host interactions including tumor neovascularization, invasion and metastasis, the tumor microenvironment, and tumor immunology will be covered. Lastly, this course will explore the histopathology, screening, diagnosis and therapeutic treatments currently available to cancer patients. Not offered every semester. BIOLOGY 573: Admission to the M.S. program in Biology.	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	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	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
BUSED	506	CLIN STUDY IN BCIT	Presents seminars on topics related to the teaching profession and instructional strategies and assessment techniques for teaching business subjects to diverse student populations. Seminar topics and discussions are closely correlated with the experiences of the Professional Semester in Business, Computer and Information Technology (BUSED 504). Prerequisites: Graduate standing and Admission into Teacher Education Certification in Business Technology (BCIT).	LEC	3	3
BUSED	521	BUSINESS RESEARCH	Introduces students to research in business fields, with a focus on business education, including Accounting, Business Law, Career Development, Communication, Economics, Personal Finance, Entrepreneurship, Information Technology, International Business, Management and Marketing, or any other competency under the business education umbrella. Tying to the National Standards for Business Education, students will research a particular field and develop a research proposal and research report that includes a purpose, literature review, delimitations, ethical considerations, method, limitations, key findings, discussion, conclusion, reference list and appendices as needed. This course will also enhance communication skills, including teamwork, interpersonal, writing, and presentation skills. This course is required for the M. Ed. in Business Education. It can also be an elective for other master degrees. May be offered in traditional and distance education formats. Prerequisites: Graduate standing or a minimum of 90 credits undergraduate courses and Graduate Dean Approval.	LEC	3	3
BUSED	534	CLASS STRAT DEVE BCIT	Prepares students enrolled in the Internship track for teaching in business education classroom following guidelines prescribed the Pennsylvania Department of Education for the Internship track. Coursework presents competencies in the key areas of teaching. Topics presented include planning, appropriate learning environment, instruction techniques, and professional responsibilities. Prerequisites: Enrollment in M.Ed in Business Education Internship Track	LEC	3	3
BUSED	535	ADV CLASS STRAT DEV	Advances on topics presented in BUSED 534 and continuing to professionally-develop students for teaching in business education classroom following guidelines prescribed in the Pennsylvania Department of Education for the Internship track. Coursework focuses on advanced competencies in the key areas of teaching and assessment. Topics presented include unit planning, classroom maintenance, implementing higher-ordering thinking skills, and continued professional development as a business teacher. Prerequisites: Enrollment in M.Ed in Business Education Internship Track and completion of BUSED 534.	LEC	3	3
CES	214	EUROP FILM & CULTURE	Explores the role of cinema, literature, print and electronic media in shaping society in Central and East European countries. Along with learning about Central and East European popular cultures, 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 appropriate for students seeking General Education Points in Arts and Humanities and Communication, and is taught in English in a combination of lecture and discussion, and formal and informal oral and written assignments. Open to all students and applicable toward the following minors or majors in Languages and Cultures: German and Central European Studies Track and Russian and East European Studies Track. Prerequisites: None.	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	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	114	QUANT FOUND CHEM	Presents a review of mathematics applications in chemistry, including dimensional analysis, algebra, and proportional thinking. Develops the principles of chemistry from the ground level with an approach to meet the needs of students identified as not prepared to successfully complete CHEM 115 - Chemistry for the Sciences 1. Three hours lecture per week. This course serves as a prerequisite to CHEM 115. This course is not open to students who have earned a C or better in CHEM 115. Prerequisites: None.	LEC	3	3
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	231	ORGANIC CHEMISTRY 1	Emphasizes structure and bonding, stereochemistry, nomenclature, physical and chemical properties and modern spectroscopy of alkanes, haloalkanes, alcohols and ethers. 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.116.	LAB	4	4
CHEM	231	ORGANIC CHEMISTRY 1	Emphasizes structure and bonding, stereochemistry, nomenclature, physical and chemical properties and modern spectroscopy of alkanes, haloalkanes, alcohols and ethers. 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.116.	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	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	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	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
CHINESE	101	CHINESE I	Basic elements of Mandarin Chinese, with emphasis on spoken language, tonal system, and basic writing. Introduces the Chinese culture. 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. Requires practice sessions in language lab. May be offered in traditional and distance education formats.	LEC	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
CLE	101	LEADERSHIP CERT	Offers an intensive series of educational leadership-based workshops, lectures, service projects, conferences, and integrative learning opportunities. The mission of the Center for Leadership & Engagement is to facilitate and provide intentional opportunities by supporting and providing resources for student growth, development, involvement and learning through leadership education, engagement, and service. By participating in the Leadership Certification program, students will gain knowledge of core leadership skill sets, enhance their co-curricular learning experiences and build meaningful and sustainable relationships to positively impact a diverse campus community and beyond. As such, students will become aware of and engage in student leadership practices that foster and sustain a culture of organizational effectiveness, community engagement, and social justice. This course earns one GEP toward Goal 10 Citizenship in general education. Prerequisites: Must submit Leadership Certification Application in the Center for Leadership & Engagement and meet with a staff member to review the program. This is open to all students with permission granted from the Center for Leadership & Engagement.	ACT	0	0
CLE	111	VAR ATHL	Provides the opportunity for students to participate fully as a member of one (or more) of the Bloomsburg University varsity athletics teams. Develops overall fitness, communication skills on- and off-the-field, teamwork strategies, and knowledge of healthy living for life. Grading basis is pass/fail, and CLE is repeatable. This course earns one GEP toward Goal 9 Healthy Living in general education. Prerequisites: None.	ACT	0	0
CLE	211	FIRST RESPONDER	Explores the benefit to the community and to the student of being an active first responder in their community. Examples of first responders for which this course may be appropriate are firefighter, fire police, police, constable, emergency medical technician, National Guard service members and so forth. This co-curricular learning experience requires at least 40 hours of service calls, including time in documentation. This co-curricular learning experience is repeatable. Prerequisite: Active service as a first responder and permission of instructor.	ACT	0	0
CLE	244	MVETS - UNIQUE EXP.	Explores experiences with cultures other than the student's own and the impact those experiences had on growth and development regarding cultural competence. Students will critically think about the differences and similarities to cultures outside of their own and how exposure to other cultures has helped them to be more aware of diversity and informed about global issues and differences. Students will explore their cultural assumptions and cultural self-awareness, and will demonstrate how better understanding other cultures has helped them to grow. This course earns two GEPs toward Goal 4 Cultures and Diversity in general education. Prerequisites: Open to military students (to include military dependents) who have had extended exposure to cultures different from their own (typically in the fashion of a deployment overseas or mobilization which resulted in foreign interactions) and permission from the Supervisor of the Office of Military and Veterans Resources.	ACT	0	0

CLE	280	BUWC PRACTICUM	Introduces students interested in working as Writing Consultants in the Bloomsburg University Writing Center (BUWC) to writing center theory and practice, writing in the disciplines, issues of language diversity, writing processes, conventions, and expectations. In addition to meeting one hour each week, prospective consultants will observe no fewer than 2.5 hours each week in the BUWC. Required for new Writing Consultants. Prerequisites: Permission of the BU Writing Center (BUWC) Director. For students who have been selected to become BUWC Writing Consultants only. This course earns one GEP toward Goal 1 Communication in general education.	ACT	0	0
CLE	300	PROGRAM LEADERS	Offers a creative learning environment for personal and professional success beyond the classroom. Encourages leadership development with a focus on student organizational leadership, community engagement leadership, social justice leadership, wellness education leadership, and group leadership. In addition increases in student engagement with the University and community through service projects, conferences, and integrative learning opportunities. By participating in the Student Program Leaders experience, students will gain leadership skill sets, enhance their co-curricular learning experiences, and build meaningful and sustainable relationships to positively impact a diverse campus community and beyond. As such, students will become aware of and engage in student leadership practices that foster and sustain a culture of organizational effectiveness, community engagement, and social justice. This will be offered in the spring. This CLE is repeatable by completing two separate programs. This course earns one GEP toward Goal 10 Citizenship in general education. Prerequisites: Must be approved by supervisor in Student Affairs and the student must be in a Student Program Leadership position for: Quest Instructors and Course Coordinators Leaders, Peer Awareness with Students (PAWS) Mentors, Student Athlete Advisory Committee, Community Government Association Executive Board, Orientation Workshop Leaders, Greek Governing Councils, Program Board Leaders, Club Sport Presidents, Multicultural Mentors, Presidential Leadership Program Officers, Office of the Dean of Students Mentor Programs, and Student Activities Event Committee Chairs.	ACT	0	0
CLE	301	CGA PRESIDENT	Provides the Community Government Association (CGA) President, the elected leader of the student body at Bloomsburg University, the opportunity to learn more regarding communication and citizenship by representing Bloomsburg University at Trustee meetings, PASSHE meetings and Town of Bloomsburg government meetings. The CGA President is an officer of Honeysuckle Student Holdings, Inc., the Kehr Union Governing Board and the Student Recreation Center Governing Board. The CGA President has fiscal responsibility for the operating budget of CGA, Inc. CGA President serves for a term of one academic year and will receive General Education points once. Prerequisites: Elected as CGA President. This course earns one GEP toward Goal 1 Communication and one GEP toward Goal 10 Citizenship in general education.	ACT	0	0
CLE	380	BUWC SPECIAL TOPIC	Explores theories, research methods, and practices of writing center work related to a particular topic beyond the introductory treatment offered in BU Writing Center Practicum. Writing Consultants read, explore, and meet for one hour each week to discuss the semester topic and aspects of their work in the BUWC. Topics may include the following: technology in writing center consulting, discipline-specific writing practices, writing center resources, writing center scholarship. Repeatable for MyCore GEPs. Required for those currently employed as a BU Writing Center (BUWC) Consultants. Prerequisites: Permission of the BU Writing Center (BUWC) Director. For current BUWC Writing Consultants. This course earns one GEP toward Goal 1 Communication in general education.	ACT	0	0

COMMSTUD	102	COMM EVERYDAY LIFE	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	151	STRESS MGMT & COPING	Introduces students to a nuanced understanding of stress from a communication perspective and a range of communication-based strategies for managing and coping with stressful experiences. Throughout this course, students will engage with communication-centered theories of stress and coping to learn the facets of "stress" such as definitions of stress, the different categories of stressors, and the common contexts in which college-aged students experience stress. Additionally, students will learn coping strategies for stress management, with special emphasis placed on coping strategies involving communication with others. The course may be offered face-to-face or via distance education, is open to all undergraduate students, and is designed to be delivered in half a semester. No prerequisites.	LEC	1	1
COMMSTUD	157	INTRO GAME STUDIES	Provides an overview of the interdisciplinary field of Game Studies, emphasizing relationships between its key theories and concepts, the video game industry, and the influence of video games in public culture. The course may be offered face-to-face or via distance education, is open to all undergraduate students, and is designed to be delivered in half a semester. Prerequisites: None.	LEC	1	1
COMMSTUD	157	INTRO GAME STUDIES	Provides an overview of the interdisciplinary field of Game Studies, emphasizing relationships between its key theories and concepts, the video game industry, and the influence of video games in public culture. The course may be offered face-to-face or via distance education, is open to all undergraduate students, and is designed to be delivered in half a semester. Prerequisites: None.	LEC	1	1

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	RHETORICAL CRITICISM	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	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	314	COMMUNICATING IDENTITY	Focuses on the role of communication in the construction of cultural identities. The course addresses processes by which individual identities are formed, maintained, and executed during interpersonal interactions. Class content explores communicative factors that impact identity development, maintenance, and negotiation as a means to make sense of social, cultural, and interpersonal structures of relating within the United States. Primary goals of the course include understanding the social construction of difference as well as social justice strategies for bridging the gap in identity differences to improve interpersonal functioning. The course is open to Communication Studies majors/minors, Ethnic Studies minors, and others by permission of instructor. This course earns 1 GEP in Goal 1 - Communication and 2 GEP's in Goal 4 - Cultures and Diversity. Course is offered at least once a year. Prerequisite: COMMSTUD.104 - Interpersonal Communication	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	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	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