Changes to the Undergraduate Bulletin will be tracked in real-time and listed below. At the end of every semester, these updates are incorporated into the Bulletin.

**Courses Added: Effective Summer 2022**

- ADTED 300: Social Movements and Education: Global Perspectives
- AG 180N: Contemporary Issues in Food, Ag, Natural Resources, and Human Sciences
- ANTH 100N: Anthropology of Race and Racism
- ANTH 434N: Black Ecologies
- ARCH 130B: Basic Design and Research II
- ARCH 482: Foundations in Shape Grammars
- ARTH 260: Museum Marketing & Communications
- ASTRO 476: The Search for Extraterrestrial Intelligence
- BBH 330: Clinic Intern Training
- BBH 426: HealthWorks Peer Education Experience
- BBH 475H: Honors Biobehavioral Analysis of Addiction
- BIOL 128: Investigations in Anatomy with Cadavers
- BIOL 477: Biology Cadaver Dissection
- BIOL 484: Biodiversity of Pennsylvania
- BIOL 489: Biology of Ecohealth in Tanzania
- CHE 396: Independent Studies
- CMLIT 7: Introduction to Middle Eastern Literatures
- CMPSC 330: Advanced Programming in C++
- CMPSC 446: Data Mining
- CMPSC 466: Introduction to Quantum Computation
- CMPSC 476: Systems Debugging
- COMM 300H: Bellisario Honors Colloquium
- COMM 428F: Strategic Communications Campaign Planning
- DS 305: Algorithmic Methods and Tools
- DS 499: Foreign Studies
- DS 440W: Data Science Capstone
- EARTH 10: Energy and Earth's Climate
- EDUC 414: Teaching Secondary Science
- ENGL 10: Group Writing Tutorial
- ENT 440: Plant-Insect Interactions
- ENVST 425: Environmental Communication
- ERM 429: The Chesapeake Bay Watershed: Issues and Careers in Complex Environmental Problem Solving
- FIN 426: Analysis of Interest Rates and Debt Markets
- FIN 480: Alternative Investments
- FRNSC 490: Traceology & Event Reconstruction
- FRNSC 412: Laboratory in Criminalistics: Trace and Impression Evidence
- GD 107: Graphic Design Studio – Components
- GD 207: Graphic Design Studio – Products
- GEOG 4: Earth and Environmental Systems Geography
- GER 115N: Science, Humanity and Catastrophe
- HDFS 101S: "Helping People" Introduction to Understanding Social Problems & How to Help
- HHD 245N: Health, humanity, and longevity: Conversations with elders
- HIST 238N: Society and Culture in Palestine/Israel
- HIST 305Y: Middle East Studies Research Workshop
- HIST 400: Global History of Food and Famine
- HIST 425: History of the Incas
- HLS 495: Homeland security internship
- HM 210N: The Impact of Culture and Customs in Global Hospitality Environments
- HPA 123S: Exploring Health Policy and Administration
- HPA 438: Culturally Competent Health Services for Diverse Populations
- IST 144N: Invasion of Technology from a 21st Century Perspective
- KINES 29C: Total Golf in Pennsylvania
- KINES 50: Lifeguarding
- KINES 470: Genetics and Human Physical Performance
- MATH 102: Bridge to Calculus
- ME 493: ME Honors Thesis Writing Preparation
- MUSIC 127: Introduction to Music Technology
- MUSIC 177: ROARS Lab
- MUSIC 437: Music Information Retrieval and Computer-Assisted Music
- MKTG 495A: Penn State Prime Practicum: Brand Management and Campaign Strategy
- NUTR 123S: First Year Seminar in Nutritional Sciences
- RHS 93: WorkLink Seminar I
- RHS 193: WorkLink Seminar II
- RHS 295A: WorkLink Internship
- RHS 404: Rehabilitation Services for Transition Age Youth with Disabilities: Theory and Practice
- RHS 493: Professional Development and Internship Preparation in RHS
- SOCW 303: Methods – Communities & Organizations
- SOCW 315: Assessment, Documentation, and Effective Interviewing Skills in Social Work
- SOCW 407: Research Methods in Social Work
- SPLED 410: Culturally Responsive Pedagogy in Special Education
- SPLED 495D: Professional Development for Special Education Teacher Candidates
- SRA 499: Foreign Studies
- STRNG 125: Harp: Primary I
- STRNG 184: Guitar: Performance II
- STRNG 234: Guitar: Performance III
- STRNG 284: Guitar: Performance IV
- STRNG 334: Guitar: Performance V
- STRNG 384: Guitar: Performance VI
- STRNG 434: Guitar: Performance VII
- STRNG 484: Guitar: Performance VIII
- STS 115: Pre-departure Intercultural Learning
- THEA 206: Critical Theory for Performance
- THEA 474: Theatre Design History I
- THEA 475: Theatre Design History II
- WFED 472: Platform Skills for Workplace Learning and Performance
Courses Added: Effective Fall 2022

- AE 240: Programming and Data Science for Architectural Engineering
- AE 494H: Honors Thesis
- AFR 234: Environment, Climate Change and Resilience in Africa
- ANSC 480: Animal Growth and Development
- ANTH 430: Ancient Brews
- BBH 310H: Research Strategies for Studying Biobehavioral Health
- BIOL 462: History of Biology
- CMPSC 204: Introduction to Computational Sciences Programming
- CMPSC 205: Intermediate Computational Sciences Programming
- CMPSC 301: Event Driven Programming for Computational Sciences
- CMPSC 348: Data Science and Machine Learning for Computational Sciences
- DA 302W: Predictive Analytics
- DANCE 383: Performance Devising
- EE 486: Sustainable Energy System Integration
- EET 310: Direct and Alternating Current Circuits
- ENGL 120: Difference in Early Literature
- ENGL 260: Theory & Practice of Screenwriting
- ENGR 185: Short Term/Short Duration Internship
- ERM 489: Supervised Experience in College Teaching
- FDS 223: Understanding Science Through Wine Beer and Bread
- FOR 489: Supervised Experience in College Teaching
- FRN 425: Chromatography and Spectroscopy in Forensic Science
- HDFS 101N: “Helping People” Introduction to Understanding Social Problems & How to Help
- HDFS 485: Supporting Healthy Development: Understanding Systems, Successes, and Challenges
- HIST 194: Jerusalem: Sacred and Profane
- HM 101: Exploring the Global Hospitality Industry
- LDT 215: Creating Designs for Learning
- LDT 410: Advanced Learning Experience Design Lab
- LPE 496: Individual Studies
- LPE 497: Special Topics
- MATH 490H: Honors Student Colloquium
- METEO 7: An Introduction to Climate Sciences: Climate change, Variability, and Society
- MUSIC 189: Studio Ensemble
- NUTR 450: Nutritional Neuroscience
- PHYS 337: Introduction to Quantum Information Science and Engineering
- PHYS 473: Physical implementation of qubits
- PUBPL 120N: State, Society, and Public Policy
- RHS 226: College Student Mental Health and Wellness
- RM 421: Short Term Actuarial Mathematics – Fundamentals
- RM 422: Short Term Actuarial Mathematics – Advanced Topics
- THEA 419: Musical Theatre: Business of the Business
- WFS 340: Statistics for Conservation of Wild Populations

Courses Dropped: Effective Summer 2022

- PLET 425: Automation for Plastics Processes
- PLET 477: Novel and Emerging Technologies
- PLET 478: Novel and Emerging Technologies
- MATSE 484Y: International Internship in Materials: Research Definition and Methodology
- EGT 102: Introduction to Computer Aided Drafting

Course Changes: Effective Summer 2022

ARTH 475: Contemporary Women Artists (3 Credits) (US) (BA)
Old Listing Effective Through Spring 2022:

An interdisciplinary course that investigates women artists who were integral to the production of contemporary art primarily in the Americas, Europe, and Asia. Cross-Listed Courses: ART 475 Prerequisites: Enforced Prerequisite at Enrollment: Fifth-semester standing and ARTH 111 and ARTH 112 and enrollment in the ARTHBA, ARBFA_BFA, AED_BS, or INART_BA degree program.

Changes Effective Summer 2022:

- Prerequisites

ARTH 476: History and Theory of Digital Art (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

History and theories of contemporary digital art emphasizing humanistic approaches to technology. ART 476 / ARTH 476 History and Theory of Digital Art (3)(BA) This course meets the Bachelor of Arts degree requirements. Approaches to Digital Art is a survey class that will offer the web designer, cyberspace architect, MUD traffic controller or enthusiastic surfer an opportunity to examine the humanistic aspects of contemporary digital art. Through readings and direct interaction with digital media and digital artists, the class will develop an appreciation of the ways in which the interface between human beings and technology has been historically constructed and is subject to critical investigation. The goal of the class is to prepare each student so that she or he may engage with digital media in a way that is every more historically and socially self aware. Students will address the ways in which digital technologies transform artistic practices such as museum display, the writing of art criticism, the definition of works of art, changing role of the artist and the changing space of the art studio. More important, however, by engaging with digital works of art students will learn to think critically about technology and its engagement with culture at large. They will be encouraged to think about the political, economic and social impact of digital technologies. This humanistic approach to technology would make this course particularly useful to students of art history, philosophy, comparative literature, art education, and the visual/plastic arts. A significant portion of the course will be devoted to the ways in which art on the internet and digital art in general challenge the integrity of categories such as race and national identity. For example, students will have an opportunity to engage with African American artists such as Keith Obadike, whose on-line performances include an attempt to put his “blackness” up for sale on ebay.com in August of 2001. Students may also look at the ways in which net.art (Art made to be viewed on the internet) can critique commercial cooptation of global culture: etoy.com, for example, is an international and collaborative artist’s group that satirizes global capital by camouflaging itself as a multinational corporation. This class will depend largely upon written responses and class discussion, rather than upon tests. Thus, students will learn how to approach difficult theoretical sources that have been assigned to them, and they will learn how to ask the kinds of questions that will help them understand such sources. This course will emphasize critical thinking rather than memorization, so students will develop analytical skills that will be useful in many other contexts. Because students will be given
weekly writing assignments, they will be able to improve their skills in composition.

Cross-Listed Courses: ART 476;

Prerequisites: Enforced Prerequisite at Enrollment: ARTH 100 or ARTH 112 or ARTH 307 or ARTH 325 or ARTH 326 or ART 211

Changes Effective Summer 2022:

• Prerequisites

BBH 410: Developmental and Health Genetics (3 Credits)
Old Listing Effective Through Spring 2022:

Discussion of genetic influences on development and the interrelationships between genetics and health.

Prerequisites: Enforced Prerequisite at Enrollment: (BIOL 133 or BIOL 222) and (STAT 200 or STAT 250)

Changes Effective Summer 2022:

• Abbreviated Title
• Description
• Prerequisites

BBH 440: Principles of Epidemiology (3 Credits) (US) (IL)
Old Listing Effective Through Spring 2022:

Theory of epidemiology and significant case studies; potential applications to health care. BBH / HPA 440 Principles of Epidemiology (3) (US;IL)This course is designed to provide students with a basic understanding of the principles of Epidemiology and to familiarize students with the methods and applications of epidemiology to understanding the bases for heterogeneity of disease and health among populations. The goals of the course are: 1) recognize and use basic principles, concepts, terminology, and techniques in Epidemiology as applied to the study of infectious disease, chronic diseases, and other health-related problems; 2) examine and understand measures of risk and burden of illness on populations defined in terms of age, race, gender, class, time, and other relevant socio-cultural and demographic factors; 3) be able to interpret and critique epidemiological research reports on the identification of risk factors and casual factors for diseases in populations; 4) assess the health status and burden of diseases and health problems of populations at multiple levels of analysis for the purpose of planning health promotion activities and health care services; 5) have a basic understanding of the epidemiology tools for disease screening and other methods for primary and secondary prevention of disease and health problems; 6) examine the validity and applicability of various health interventions used to improve health status and the barriers for successful interventions; and 7) have a basic understanding of the epidemiology of the major causes of morbidity and mortality in the U.S. and for other selected regions and nations of the world. This is a required course in the Biobehavioral Health major and an elective course in the Health Policy and Administration major. The course is also appropriate for students intending to advance to post-baccalaureate graduate and professional programs in medicine, public health, health policy and planning, and other health-related careers. Students will be evaluated based on their performance on a combination of written assignments, a term paper or project, and exams.

Cross-Listed Courses: HPA 440

Prerequisites: Enforced Prerequisite at Enrollment: (BBH 101 or BIOL 110 or HPA 310) and (STAT 200 or STAT 250)

Changes Effective Summer 2022:

• Abbreviated Title
• Description
• Prerequisites

BIOL 220M: Honors Biology: Populations and Communities (4 Credits) (H) (WF) (BA)
Old Listing Effective Through Spring 2022:

Honors study of the major physical, chemical, and biological factors constituting environment and their dynamic interaction with organisms forming ecosystems. A study of the structures and functions of organismic interactions from simple populations to complex ecosystems. (BIOL 220W, BIOL 230W, and BIOL 240W each carry only 1 credit of "writing"; all three courses must be taken to meet the writing requirement.) BIOL 220M is an introductory course in ecology. It introduces students to the fundamental ecological principles, concepts, patterns, and processes regarding populations, communities, and ecosystems. This course provides students with a foundation of ecological science, as well demonstrating linkages between ecology, population genetics, and evolution. The course objectives are the same as those described in the original course proposal and are to provide students with a fundamental understanding of: 1) genetic processes within populations of living things, 2) evolutionary processes involved in speciation, 3) dynamic interactions of organisms within and among populations, especially pertaining to energy cycles, various biogeochemical cycles, predator-prey interactions, and the like, and 4) distribution patterns of living organisms and the need to conserve the resources of the earth.

Prerequisites: Enforced Prerequisite at Enrollment: BIOL 110H

Changes Effective Summer 2022:

• Prerequisites

BIOL 240M: Honors Biology: Function and Development of Organisms (4 Credits) (H) (WF)
Old Listing Effective Through Spring 2022:

Honors study of development and physiological processes at the organismic level. ( BIOL 220W , BIOL 230W , and BIOL 240W each carry only 1 credit of "writing"; all three courses must be taken to meet the writing requirement.) This course provides an understanding of the major unifying principles as they apply to the study of the development and physiological mechanisms utilized by organisms from both animals and plants. In lecture a comparative approach will be taken in the examination of reproduction, development, and physiology primarily at the organismal level. In laboratory, experimental investigations of both animal and plant systems will reinforce the concepts covered in lecture. Through the lab, students are expected to become proficient in the interpretation and presentation of experimental results through written and oral reports. Taken together with the other core courses in the biology curriculum ( BIOL 110 , BIOL 220 , BIOL 230W ) , BIOL 240M will help students to integrate concepts ranging from molecular and cellular events through principles governing entire populations and ecosystems. Further, BIOL 240M provides the foundation on which students further their study of animal physiology and development — two of the largest options in the biology majors curriculum. Through this class, and the other core course, students will develop skills integral to the General Education
mission. Evaluation methods in the lecture part of the course include two to three "mid-term" exams and a comprehensive final exam. Evaluation methods in the lab portion of the course include in-class quizzes, one or more formal lab reports on experiments or data analysis conducted in lab sessions, and short write-ups of existing data sets or relevant ecological issues. The Honor's version of the course will differ in a number of ways from the parent BIOL 240W course. First, there are more opportunities to discuss current applications of the information. In addition, a unique project (either in lab and/or in lecture) will allow students to explore a specific area of the course more detail (e.g., students choose a topic in the current literature and present a paper along with its significance to the class). Where appropriate, students will be exposed to current research in specific areas. The evaluation for the course will be modified from that of the parent course in accordance with the changes in assignments.

Prerequisites: Enforced Prerequisite at Enrollment: BIOL 110H and CHEM 110 or CHEM 110H

Changes Effective Summer 2022:

• Prerequisites

CAMS 440W: Studies in Classical and Ancient Mediterranean Archaeology (3-6 Credits: Maximum of 6 Credits) (WF) (BA)

Old Listing Effective Through Spring 2022:

Selected topics in the literary sources and material evidence for classical and ancient Mediterranean society. CAMS 440W/CAMS 440W Studies in Classical Archaeology (3-6) (BA) This course meets the Bachelor of Arts degree requirements. CAMS 440W is a writing-across-the-curriculum upper level archaeology course on various topics in the broad field of ancient Mediterranean archaeology. The course will vary depending on the specific topic, which could be a study of authors such as Herodotus and/or Pausanias in relation to the archaeological record; epigraphy; numismatics; food production and consumption (e.g., diet, subsistence requirements, public dining, symposia, Roman dining, furnishings) from the literary and archaeological record; various classes of ancient Mediterranean ceramics; or the archaeological study of a specific urban site, such as Troy, Babylon, Egyptian Thebes, the Athenian Agora, or Pompeii with an emphasis upon economic and social organization. In most semesters the topic will emphasize interdisciplinary themes, such as comparative state formation, or Egyptian-Greek-Persian relations, or the cultural development of a particular society, such as the Etruscan, that was strongly influenced by interaction with other Mediterranean cultures. Students will learn of major publications in the field of study, and how to conduct searches of the previous archaeological literature and the related literary record. As one requirement, students will complete a research paper on a topic related to the particular theme of the course that semester. The sequence of writing assignments is designed to allow students to develop a project, to search for related publications, to develop a proposal, and to revise drafts of the final paper. The course is also intended to provide students with a practical background in Classical and ancient Mediterranean archaeology that will help prepare them for fieldwork at ancient Mediterranean sites, for the interpretation of archaeological publications, and, as relevant, for utilizing the literary and/or epigraphic record for interpreting archaeological evidence. Those considering enrolling in this course may obtain information about the specific topic by asking the faculty member listed as teaching the course or the Undergraduate Officer in the Department of Classics and Ancient Mediterranean Studies.

Changes Effective Summer 2022:

• Description
• Prerequisites
• Cross-Listing

CRIM 250W: Research Methods in Criminology (3 Credits)

Old Listing Effective Through Spring 2022:

The purpose of this writing-intensive course is to engage students in the social scientific research process used by criminologists to answer empirical research questions. It is the second course (after CRIM 249) that overviews theory and research in criminology. Students learn to use social science research methods through instructor-led demonstrations and applications of research methods, data analysis exercises, and critical reading of published research. Students apply their research knowledge and skills to an empirical research project completed in a sequence of steps producing written drafts that receive instructor feedback. After completion of this course, students will have acquired the following knowledge and skills: (1) The ability to generate a research question and effectively and efficiently search and review the relevant research literature. (2) A working knowledge of how to apply social science research methods and research designs to answer research questions. (3) The ability to strategically read published research articles to extract different types of information. (4) An understanding of the inductive and deductive aspects of the research process. (5) The ability to collect, analyze, and interpret quantitative and qualitative data. (6) The ability to design a quantitative research project to test hypotheses of interest to criminologists. (7) The ability to summarize and explain in writing the methods used and results derived from studies seeking answers to a common research question. (8) An understanding of social science research methods needed to be critical consumers of research and claims about crime, criminal behavior, and social response to them. (9) A certified knowledge about ethical issues in social science research.

Cross-Listed Courses: CRIMJ 250W

Prerequisites: CRIM 12

Changes Effective Summer 2022:

• Remove Cross-Listing
• Prerequisites

CRIM 490: Crime Policy (3 Credits)

Old Listing Effective Through Spring 2022:

This course focuses on criminal justice policy and the factors that influence policy development and implementation. CRIM 490 Crime Policy (3) This class will study crime and criminal justice in the context of law and the development and implementation of public policy. The course will focus on the politics of law and social control by exploring the construction of crime as a social problem, fundamental aspects of the policy development and implementation process, the legal interpretation of public policy, and the role of federal, state, and local governments in crime control. Students will be evaluated on essay exams and a term paper. This course is intended to be a capstone course for advanced undergraduates. The course will draw on the broad range of course work that students will have taken prior to taking this course to develop a course that takes what we know about crime, the law and the justice system and focus on public policy as it relates to these areas. The course may be used toward the six credits required at the 400 level under Additional Courses or as one of the courses under the Legal Studies Option.
Changes Effective Summer 2022:

• Prerequisites
• Cross-Listing

**DS 310: Machine Learning for Data Analytics (3 Credits)**
Old Listing Effective Through Spring 2022:

The course teaches students the principles of machine learning (and data mining) and their applications in the data sciences. DS 310 Machine Learning for Data Analytics (3) The course introduces the principles of machine learning (and data mining), representative machine learning algorithms and their applications to real-world problems. Topics to be covered include: principled approaches to clustering, classification, and function approximation from data, feature selection and dimensionality reduction, assessing the performance of alternative models, and relative strengths and weaknesses of alternative approaches. The course will include a laboratory component to provide students with hands-on experience with applications of the algorithms to problems from several domains. Prerequisites for the course include basic proficiency in programming, elementary probability theory and statistics, and discrete mathematics.

Prerequisites: Enforced Prerequisite at Enrollment: (CMPSC 121 or CMPSC 131) and STAT 318

**Changes Effective Summer 2022:**

• Prerequisites

**DS 320: Data Integration (3 Credits)**
Old Listing Effective Through Spring 2022:

Recommended Preparations: DS 310 Modern data-intensive applications (healthcare, security, public policy, science, commerce, crisis management, education, among others) increasingly call for integration of multiple types of data from disparate sources. This course introduces students to the principles and the practice of data integration, with particular emphasis on relational, knowledge-based, graph-based, and probabilistic methods. Carefully crafted assignments will help enhance the students' mastery of both the theoretical underpinnings as well as practical aspects of data integration. The students will work in teams to solve representative data integration problems drawn from real-world applications. Upon completion of the course, students should be able design, implement, and evaluate data integration solutions to support data intensive applications.

Prerequisites: Enforced Prerequisite at Enrollment: DS 220 and STAT 318

**Recommended Preparation: DS 310**

**Changes Effective Summer 2022:**

• Prerequisites

**DS 410: Programming: Models for Big Data (3 Credits)**
Old Listing Effective Through Spring 2022:

Recommended Preparations: DS 310, CMPSC 448 This course introduces modern programming models and related software stacks for performing scalable data analytics and discovery tasks over massive and/or high dimensional datasets. The learning objectives of the course are that the students are able to choose appropriate programming models for a big data application, understand the tradeoff of such choice, and be able to leverage state-of-the-art cyber infrastructures to develop scalable data analytics or discovery tasks. Building on data models covered in DS 220, this course will introduce programming models such as MapReduce, data flow supports for modern cluster computing environment, and programming models for large-scale clustering (either a large number of data samples or a large number of dimensions). Using these frameworks and languages, the students will learn to implement data aggregation algorithms, iterative algorithms, and algorithms for generating statistical information from massive and/or high dimensional data. The realization of these algorithms will enable the students to develop data analytic models for massive datasets.

Cross-Listed Courses: CMPSC 410

Prerequisites: Enforced Prerequisite at Enrollment: (CMPSC 122 or CMPSC 132) and DS 220. Recommended Preparation: DS 310 or CMPSC 448

**Changes Effective Summer 2022:**

• Prerequisites

**EARTH 111: Water: Science and Society (3 Credits) (US)**
Old Listing Effective Through Spring 2022:

Investigation of water behavior and occurrence, its relevance to life, human activities, politics, and society. EARTH 111 Water: Science and Society (3) (GN;US) The Earth is often called 'The Blue Planet', a reference to the fact that over two-thirds of its surface is covered by water. Despite its apparent abundance, water is a valuable and limited resource; less than 2.5% of the water on the planet is fresh, and only one third of that is potable. And that's not all – the small fraction of Earth's water that is usable to humans is distributed very unevenly. As a result, conflicts over water occur from the local level, for example: pitting rancher against developer – to the global level, at which nations square off against one another in war and use water as a mechanism for imposing sanctions. The dire situation in some regions has spurred numerous research and technological endeavors, such as water desalinization, genetic engineering of crops, and major overhauls of agricultural practice. In this course, we will explore the relationships between water and human populations, with emphasis on water resources and quality in the Western U.S., and how these have shaped history and modern politics. We will focus first on developing the scientific underpinnings of water's unique properties, behavior, movement, occurrence, and quality. With this background, we will then discuss key issues relating to modern and historical conflicts, human impacts on the natural world, and human engineering accomplishments driven by our thirst for this valuable resource. We will discuss historical examples from the American West, specifically the development of water resources in Colorado and California. We will also explore modern and historical conflicts between stakeholders. Major themes will include political and economic conflicts over (1) water resources – for example, balancing agricultural and urban demands in the American west in the Denver and Los Angeles metropolitan areas, (2) water quality – for example, considering the impact of economically profitable human activities on water quality and transmission of disease, and (3) human impacts on natural processes, specifically connecting human activity with our cultural history of water use and exploration in the American West. Our approach is to include a substantial component of student-initiated learning. The course will include critical evaluation and discussion of assigned reading and films, a series of laboratory exercises and field trips to illustrate concepts and stimulate discussion, and a major research paper.

**Changes Effective Summer 2022:**
recurring boom-bust cycles of oil markets and the political arrangements associated with them. This development is a more complete understanding of the role of oil in international affairs. The focus then shifts back to military affairs with a discussion of the role of oil in the battles of World War II. We then examine the social and cultural roots of the post-war dissolution of company ownership and the nationalization of oil reserves. Also in the policy arena, is a discussion of the policy response of western governments to a growing dependence upon low-cost oil from the Middle East, Africa, and South America. The analysis then focuses on the ideology and strategy behind the formation of the Organization of Petroleum Exporting Countries (OPEC) and the motivations and execution of their strategies to drive up oil prices during the 1970s and early 1980s. The last part of the course discusses the emergence of oil as a commodity traded in open commodity market exchanges, the development of reserves in deep water and in Africa, and the relationship between oil policy and the war on international terrorism. The course will be offered during the spring semester and will include a field trip to the Pennsylvania oil region. Evaluation and assessment of student performance will rely on grading on-line quizzes and assignments, team papers and presentations, and examinations.

EDUC 495B Senior Field Experience (1 Credit: Maximum of 1 Credit)
Old Listing Effective Through Spring 2022:

EDUC 495B Senior Field Experience (1) This course is designed to provide Elementary Education majors with an intensive field experience that acquaints the student with the 'real' world of elementary education in an urban setting. The experience will be under the direction of a certified elementary teacher in the Harrisburg or Steelton-Highspire School Districts. Students will have an opportunity to actively work at the primary (K-3) and/or the intermediate (4-6) level, and will be directed to accomplish specific field tasks assigned by their course instructors. These tasks are directly related to each course in which the student is enrolled. Students are assigned a university supervisor who observes and consults with the students throughout the experience. Specific activities will vary depending on the grade level and the school district's curriculum. Students are evaluated by both the cooperating teacher and the university supervisor, and test evaluations are based on classroom observations. This course is offered each semester and is required of all students enrolled in the Elementary Education program.

Changes Effective Summer 2022:

• Credits
• Description

EE 341: Semiconductor Device Principles (3 Credits)
Old Listing Effective Through Spring 2022:

Quantitative description of properties and behavior of materials with applications to integrated circuits, photonic devices, and quantum well devices.

Changes Effective Summer 2022:

• Description
• Prerequisites
• Concurrent

EGEE 120: Oil: International Evolution (3 Credits) (US) (IL)
Old Listing Effective Through Spring 2022:

Survey of the commercial development of the world petroleum industry from various international, historical, business, and cultural perspectives. EGEE 120 Oil: International Evolution (3) (GS;US;IL) Oils is the world's most important commodity. Access to oil was decisive in the great military struggles of the 20th century. The economic and strategic value of oil has led to the evolution of a fascinating array of business, political, and strategic alliances around the world. The objective of this course is to describe this evolution and the technological, commercial, and political innovations shaping its current face. This knowledge is vital in achieving a more complete understanding of the role of oil in international affairs and economic development. The course begins with a discussion of the development of the American and European oil industries during the 19th century and the formation of the first great industrial oil monopolies. The emergence of oil as a strategic commodity prior to and during World War I will then be discussed. The economic and technological reasons for the recurring boom-bust cycles of oil markets and the political arrangements developed to cope with their effects is the third major topic of the course. The focus then shifts back to military affairs with a discussion of the role of oil in the battles of World War II. We then examine the social and cultural roots of the post-war dissolution of company ownership and the nationalization of oil reserves. Also in the policy arena, is a discussion of the policy response of western governments to a growing dependence upon low-cost oil from the Middle East, Africa, and South America. The analysis then focuses on the ideology and strategy behind the formation of the Organization of Petroleum Exporting Countries (OPEC) and the motivations and execution of their strategies to drive up oil prices during the 1970s and early 1980s. The last part of the course discusses the emergence of oil as a commodity traded in open commodity market exchanges, the development of reserves in deep water and in Africa, and the relationship between oil policy and the war on international terrorism. The course will be offered during the spring semester and will include a field trip to the Pennsylvania oil region. Evaluation and assessment of student performance will rely on grading on-line quizzes and assignments, team papers and presentations, and examinations.

Changes Effective Summer 2022:

• Abbreviated Title
• Description

ENGL 2: The Great Traditions in English Literature (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Major works of fiction, drama, and poetry from the Middle Ages to the twentieth century expressing enduring issues and values. ENGL 2 The Great Traditions in English Literature (3) (GH)(BA) This course meets the Bachelor of Arts degree requirements. Students are expected to learn fundamental skills of close textual analysis in the context of established literary texts of English and Irish fiction, drama, and poetry from the Middle Ages to the twentieth century that address large questions of ethical and social value. They are also expected to learn to talk and write clearly about the issues and ideas generated by the texts that they are directed to read. ENGL 2 will require all students to confront the major interpretive problems found in their assigned readings and to participate actively in the various forms of critical thinking required to comprehend and resolve those problems. ENGL 2 will require all students to participate in an assessment of the social behavior and other values, both communal and scholarly, relevant to the texts being read and discussed in the course. This course fulfills a General Education humanities requirement or a Bachelor of Arts humanities requirement.

Changes Effective Summer 2022:

• Add IL Designation
• Add Inter-Domain Designation
• Change Course Number to 111N
• Description

ENGL 2H: The Great Traditions in English Literature Honors (3 Credits) (H) (BA)
Old Listing Effective Through Spring 2022:

ENGL 2 is a lecture/discussion course that addresses major works of English and Irish fiction, drama, and poetry from the Middle Ages to the twentieth century. The course is designed to give students an introductory appreciation of a wide range of established works of literature written in English. The goal of this course is not only to give students a sense of literary history, but also to encourage students to question how such texts express larger concerns about issues and values central to human experience. English 2 is designed to prepare students for additional college-level literature courses and to help students learn the fundamental skills of close textual analysis vital to
all humanistic study. This Honors section is enriched by more rigorous requirements (longer papers, and a research component to each paper where the student is required to cite and engage critical sources and conversations). Participation requirements are also enhanced, making for a richer honors experience.

Changes Effective Summer 2022:

- Add IL Designation
- Description

ENGL 129H: Shakespeare (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

ENGL 129H constitutes a broad introduction to Shakespeare's dramatic works from a variety of thematic, historical, formal, and/or generic vantages. Students will practice close reading Shakespeare's language while also learning how his plays reflect upon the social and theatrical conventions of the historical period in which they were written and performed. Approaches taken to the plays will vary from class to class, but may include a chronological introduction to the development of Shakespeare's plays, a consideration of a principal Shakespearean theme or themes through a number of plays from across Shakespeare's career, a consideration of Shakespeare's protagonists through a number of plays from across Shakespeare's career, or a consideration of a number of Shakespeare's plays in historical context. The class will attend to issues such as gender, social class, politics, sexuality, and race, and students will learn how Renaissance perspectives on these issues differed from their own. In order to analyze how Shakespeare's plays continue to be adapted and transformed, the class may also involve the study of modern stage and film performances of Shakespeare. Time allotted for the discussion of each play will vary, but students should expect to read, on average, one play every 1-2 weeks. This class will prepare students for advanced courses in early modern literatures as well as other academic courses that engage in the verbal and written analysis of complex written texts.

Changes Effective Summer 2022:

- Add IL Designation
- Description

ENGL 129: Shakespeare (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

ENGL 129 constitutes a broad introduction to Shakespeare's dramatic works from a variety of thematic, historical, formal, and/or generic vantages. Students will practice close reading Shakespeare's language while also learning how his plays reflect upon the social and theatrical conventions of the historical period in which they were written and performed. Approaches taken to the plays will vary from class to class, but may include a chronological introduction to the development of Shakespeare's plays, a consideration of a principal Shakespearean theme or themes through a number of plays from across Shakespeare's career, a consideration of Shakespeare's protagonists through a number of plays from across Shakespeare's career, or a consideration of a number of Shakespeare's plays in historical context. The class will attend to issues such as gender, social class, politics, sexuality, and race, and students will learn how Renaissance perspectives on these issues differed from their own. In order to analyze how Shakespeare's plays continue to be adapted and transformed, the class may also involve the study of modern stage and film performances of Shakespeare. Time allotted for the discussion of each play will vary, but students should expect to read, on average, one play every 1-2 weeks. This class will prepare students for advanced courses in early modern literatures as well as other academic courses that engage in the verbal and written analysis of complex written texts.

Changes Effective Summer 2022:

- Add IL Designation
- Description

ENGL 182: Literature and Empire (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Literature written in English from countries that were once part of European empires, e.g., India, Canada, South Africa, and others.

Changes Effective Summer 2022:

- Add IL Designation
- Description

ENGL 192: The Literature of Fantasy (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Perhaps more than any other genre of speculative fiction, fantasy is richly varied. This course examines the development of literary traditions in fantasy literature from their earliest origins in mythology and folklore, through the historical development of classic fantasy works, into the books, movies and other fictions of the modern day. The course also explores different critical and theoretical approaches to the student of fantasy literature and related artistic traditions, as surrealism and magical realism.

Changes Effective Summer 2022:

- Add IL Designation
- Description

ENGL 202A: Effective Writing: Writing in the Social Sciences (3 Credits) (GWS)
Old Listing Effective Through Spring 2022:

Changes Effective Summer 2022:

- Add IL Designation
- Description

ENGL 104: The Bible as Literature (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Study of the English Bible as a literary and cultural document. ENGL 104 The Bible as Literature (3) (GH) (BA) This course meets the Bachelor of Arts degree requirements. The purpose of this course is to acquaint students with the literature of the Bible. Throughout this course, students will examine the language, thought, images, and structures of the book that has arguably proved the central text of Western literature. Students will also actively explore the ways in which the Bible has shaped the literature of English-speaking cultures. Students will read substantial portions of the Old and New Testaments, learning to read critically and to interpret the Bible as they would any other literary text. They will also learn about the historical construction of the Bible and contemplate the competing versions of existing Biblical texts. Students will be asked to complete at least three writing assignments.

Cross-Listed Courses: JST 104

Changes Effective Summer 2022:

- Add IL Designation
- Description

ENGL 192: The Literature of Fantasy (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Perhaps more than any other genre of speculative fiction, fantasy is richly varied. This course examines the development of literary traditions in fantasy literature from their earliest origins in mythology and folklore, through the historical development of classic fantasy works, into the books, movies and other fictions of the modern day. The course also explores different critical and theoretical approaches to the student of fantasy literature and related artistic traditions, as surrealism and magical realism.

Changes Effective Summer 2022:

- Add IL Designation
- Description
ENGL 202A introduces students to the types of writing that social scientists typically do in the workplace, including research proposals, proper citation practices, literature reviews, and research reports. In discussing writing and writing activities, this class will focus on some of the more common forms of social science research – among them, experiments, interviews, observations, and surveys. Students will learn to formulate ideas and create coherent pieces of writing from the research they have conducted and read about. In short, this course will introduce students to a variety of writing and research strategies from which they can begin to develop their own identity as a social scientist. (A student may take only one course for credit from ENGL 202A, 202B, 202C, and 202D.)

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T) and 4th Semester

Changes Effective Summer 2022:

• Prerequisites

**ENGL 202B: Effective Writing: Writing in the Humanities (3 Credits)**  
(GWS)  
Old Listing Effective Through Spring 2022:

Instruction in writing persuasive arguments about significant issues in the humanities. (A student may take only one course for credit from ENGL 202A, 202B, 202C, and 202D.) ENGL 202B Advanced Writing in the Humanities encourages students to develop professional writing skills most likely required in humanities careers. These writing modes include professional materials and then a wider range of writing projects that may include a professional narrative, analysis of a controversy, argumentation, persuasion, and synthesis. Students may analyze a wide-variety of texts – both verbal, digital, and visual – to learn skillful argumentation with advanced writing techniques.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T) and 4th Semester

Changes Effective Summer 2022:

• Prerequisites

**ENGL 202C: Effective Writing: Technical Writing (3 Credits)**  
(GWS)  
Old Listing Effective Through Spring 2022:

Writing for students in scientific and technical disciplines. (A student may take only one course for credit from ENGL 202A, 202B, 202C, and 202D.) ENGL 202C is an advanced writing course designed to help students in science and engineering develop the writing strategies that they will need to communicate successfully on the job and to help them understand why those strategies are appropriate and effective. A key emphasis will be on the rhetorical principles of effective communication, including context analysis and defining clear, actionable purposes. Students will gain experience with a wide range of technical writing genres, including reports, descriptions, definitions, procedures, job application documents, emails, memos, and web applications. Students will also learn about the importance of document and graphic design, including how best to design communications to maximize their potential for success.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T) and 4th Semester

Changes Effective Summer 2022:

• Prerequisites

**ENGL 223N: Shakespeare: Page, Stage, and Screen (3 Credits)**  
Old Listing Effective Through Spring 2022:

This course will explore the relation between literary analysis and both film and theatrical performance by asking students to approach a limited set of plays from multiple perspectives, using texts, film, and theatrical performance to integrate these methodologies. Students will work closely with Shakespearean texts, practice textual and poetic analysis, and will also examine critically different forms of performance: film and live theatre. In particular, the course will explore the interrelation of these elements, revealing a deeper imaginative understanding of works that continue to influence English-speaking literature and culture.

Changes Effective Summer 2022:

• Add IL Designation
• Abbreviated Title
• Description

**ENGL 250: Peer Tutoring in Writing (3 Credits)**  
(BA)  
Old Listing Effective Through Spring 2022:

Introduction to theories and skills of successful peer tutoring in writing. Provides tutoring experience in a writing center.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Summer 2022:

• Prerequisites

**ENGL 310H: Honors Thesis in English (3 Credits)**  
(H)  
(BA)  
Old Listing Effective Through Spring 2022:

Research paper or creative project on a topic approved by the Departmental Honors Committee.

Changes Effective Summer 2022:

• Description
• Prerequisites

**ENGL 312: Globality and Literature (3 Credits)**  
(BA)  
Old Listing Effective Through Spring 2022:

Examines relationships between literature and culture, through the study of major texts in English by writers of various cultures.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Summer 2022:

• Add IL Designation
• Description

**ENGL 400: Authors, Texts, Contexts (3 Credits: Maximum of 6 Credits)**  
(BA)  
Old Listing Effective Through Spring 2022:
styles, cultural milieus, critical perspectives toward particular English-language authors and/or movements they represent, and the idea of authorship. (Section subtitles may appear in the Schedule of Courses.)

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Summer 2022:

- Prerequisites

ENGL 401: Studies in Genre (3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Spring 2022:

English-language texts exemplifying particular genres, with attention to critical theories, historical development, rhetorical strategies, and social, cultural, and aesthetic values. (Section subtitles may appear in the Schedule of Courses.)

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Summer 2022:

- Prerequisites

ENGL 401W: Creative Writing Theory (3 Credits) (WF) (BA)
Old Listing Effective Through Spring 2022:

Theories of art and creativity which inform the making of literary works.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Summer 2022:

- Prerequisites

ENGL 402: Literature and Society (3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Spring 2022:

Texts confronting social, political, technological, or other issues in the English-speaking world. (Section subtitles may appear in the Schedule of Courses.) ENGL 402 Literature and Society (3)(BA) This course meets the Bachelor of Arts degree requirements. One variation will focus on Literature and Censorship by first considering general arguments for and against censorship and then by examining texts by writers who sought publication in their own country but whose books were censored or banned. The course will consider such questions as, Are there ever legitimate grounds for censorship? How do standards of censorship differ between countries? What is the relation between censorship on political and on moral grounds? What does artistic merit have to do with concern about moral or political subversion? Works from England, South Africa and the United States will be read and discussed, and where available, excerpts from trial transcripts will be read in order to examine arguments for and against publication. Readings will include works by Milton, D. H. Lawrence, Alan Paton, Nadine Gordimer, Athol Fugard, Eugene O’Neill, Henry Miller, and Alan Ginsberg. Another variation will focus on war and gender in 20th century American literature by examining the ways male and female authors write about war. Texts will vary from battlefield experiences to repercussions of war to the symbolic implications of war. Questions will be raised about literary authority: Does one need to be combatant to write about war? If not, how does one find the authority to speak, particularly as a woman? How does race and/or ethnicity complicate one’s perceptions of American participation in war? Readings will include works by Ernest Hemingway, William Faulkner, Joseph Heller, Cynthia Ozick, Leslie Marmon Silko, Norman Mailer, Bobbie Mason, Tim O’Brien, and Toni Morrison. Another variation will focus specifically on the writings which emerged from the postwar African-American struggle for civil rights. The course will include not only fiction and poetry but also those speeches, sermons, editorials, and other forms of discourse to have emerged from the era. The emphasis will be both traditional literary concerns as well as on the various rhetorical strategies involved in each work. Ideally, the course would make visible to students the difficulties attendant upon any attempt to separate the concerns of rhetoric and persuasion too firmly from the concerns of literature. The course could conclude with a look at some of the various biographies, autobiographies, and histories written over the last twenty-five years, which attempt to shape our national memory. Other variations include literature as a response to Newtonian science or to Darwinism or to the American Depression or to postwar technology or to new dystopias or to AIDS or, as in the sample outline, the Civil Rights movement.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Summer 2022:

- Prerequisites

ENGL 403: Literature and Culture (3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Spring 2022:

Historical, theoretical, and practical issues within cultural studies in relation to English-speaking texts. (Section subtitles may appear in the Schedule of Courses.) ENGL 403 Literature and Cultural Studies (3)(BA) This course meets the Bachelor of Arts degree requirements. Topics covered in this course will vary from semester to semester, but a broad framework will be to introduce students to literary and other texts read in relation to cultural studies. Individual instructors may take up different historical periods, while other versions may suggest ways cultural studies draws on different theoretical discourses such as rhetoric, deconstruction, feminism, or the New Historicism for its problems. All Reading Culture courses should serve as an introduction to cultural studies, moving from theoretical to practical readings of literature and culture. In any case, a common goal would involve examining cultural studies as constituted by plural theories and ends.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Summer 2022:

- Prerequisites

ENGL 404: Mapping Identity, Difference, and Place (3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Spring 2022:

Ethnicity, gender, class, race with reference to theoretical inquiry into identity, difference, and place in English-language literatures. (Section subtitles may appear in the Schedule of Courses.)
### Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

#### Changes Effective Summer 2022:
- **Prerequisites**

**ENGL 487W: Senior Seminar (3 Credits) (WF) (BA)**

**Old Listing Effective Through Spring 2022:**

Issues, themes, periods, critical theories, etc., that invite students to use prior English studies, limited to seniors majoring in English.

**Prerequisites:** Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

#### Changes Effective Summer 2022:
- **Prerequisites**

**ENGL 491: The Capstone Course in Professional Writing (3 Credits) (BA)**

**Old Listing Effective Through Spring 2022:**

This culminating course for Professional Writing majors concentrates on reflective analyses, design, and presentation of documents in the development of professional portfolios.

**Prerequisites:** Enforced Prerequisite at Enrollment: [ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)] and (ENGL 202A or ENGL 202B or ENGL 202C or ENGL 202D) and 7th Semester standing or higher AND enrollment in the PWRIT_BA major.

#### Changes Effective Summer 2022:
- **Prerequisites**

**ERM 440: Chemistry of the Environment: Air, Water, and Soil (3 Credits)**

**Old Listing Effective Through Spring 2022:**

A global perspective of the chemical principles, composition and processes that operate within and between air, water, and soil environments. E R M 440 Chemistry of the Environment: Air, Water, and Soil (3) This course provides a global perspective of the chemical principles, composition and processes that operate within and between air, water and soil environments. The course is designed to develop knowledge of chemistry fundamentals as applied to the principles and concepts used in environmental chemistry. Upon completion of this course, students will have an understanding of soil, water, and air chemical principles and their applications. Specifically designed for juniors and senior undergraduates, the course will link theoretical chemistry concepts to real-world environmental problems. Students will be evaluated on examinations, homework, and class participation.

**Prerequisites:** CHEM 110, CHEM 111, CHEM 112; CHEM 202 or CHEM 210

#### Changes Effective Summer 2022:
- **Title**
- **Abbreviated Title**
- **Description**

**HCDD 264: Design Practice in Human-Centered Design and Development (3 Credits)**

**Old Listing Effective Through Spring 2022:**

This course focuses on concepts, methods, techniques, and tools for designing effective technology-enabled experiences. The course will provide students with all the elements for a toolbox they can use to design and create both prototypes and working applications, and some analytic methods they can use to perform basic evaluations. The course will emphasize iterative design and the benefits of employing a cycle of analyze – design – build – evaluate in close cooperation with prospective technology users and other product stakeholders. In addition to more practice-oriented skills and knowledge, the course will provide students with an appreciation for some persistent design challenges including managing design trade-offs, ensuring universal and international access, working with others on co-design, and receiving and delivering design critiques. Students who successfully complete the course will leave equipped to engage with practicing design teams in industry, government, and academia.

**Prerequisites:** Enforced Prerequisite at Enrollment: IST 242 and (HCDD 113 or HCDD 113S)

#### Changes Effective Summer 2022:
- **Prerequisites**

**HCDD 340: Human-Centered Design for Mobile Computing (3 Credits)**

**Old Listing Effective Through Spring 2022:**

The course will provide students with an appreciation for the importance of mobile computing in modern life. It will also provide an introduction to the technical aspects of mobile computing including input modalities, sensors and sensing, wearable and smart home devices, and virtual/augmented reality. It will provide an introduction to established design concepts as well as explore emerging ideas and new concepts in the domains of mobile computing, and explore some of the most important domains where mobile computing is having a significant impact including health and wellness and computing in the developing world. The latter part of the course will include an analysis, design, and development project for students to work on individually or in groups.

**Prerequisites:** Enforced Prerequisite at Enrollment: HCDD 264 and IST 311

#### Changes Effective Summer 2022:
- **Prerequisites**

**HCDD 364W: Methods for Studying Users (3 Credits) (WF)**

**Old Listing Effective Through Spring 2022:**

This course focuses on concepts, methods, and techniques for studying users and evaluating technology in the context of use. It will provide students with methods and tools they can use to incorporate knowledge of users and their settings into the design and evaluation of interactive systems. These methods will include both qualitative and quantitative techniques, as well as how to combine and sequence multiple techniques to gain a more holistic understanding. Students will learn to select and use appropriate data gathering and analysis methods and how to assemble these into a coherent user research design. The course also provides an overview of the most important statistical analysis methods.
employed in user research. This is a hands-on, practical course designed for HCDD undergraduate students, and others as an elective.

Prerequisites: Enforced Prerequisite at Enrollment: HCDD 264 and IST 311

Changes Effective Summer 2022:

- Prerequisites

HCDD 440: Human-Centered Design and Development Capstone Course (3 Credits)

Old Listing Effective Through Spring 2022:

The Human-Centered Design and Development Capstone course develops the research orientation and creative problem solving necessary for successful careers. The capstone develops these skills in the context of a semester long project, the solution to which requires integration of knowledge, skills and analytic techniques taught in the core curriculum. The capstone will also give student a real world experience in which they will need to work in teams and will be coached on ways to translate analytic outcomes into meaningful and actionable information for decision makers. The course is intended for seniors who have successfully completed the core courses. The capstone projects will integrate knowledge gained in technical subjects such as usability engineering, software construction and engineering, and mobile computing as well as general information technology topics such as machine learning, data mining, data integration and visualization, and privacy and security. Students will also hone their presentation and technical writing skills, generating effective reports that not only explain their analytic processes, assumptions underlying the processes and outcomes, but also communicate the limitations of their approach and potential alternate strategies.

Prerequisites: Enforced Prerequisite at Enrollment: (IST 261 or IST 361) and HCDD 364W. Recommended Preparations: HCDD 340

Changes Effective Summer 2022:

- Prerequisites

INART 215: The Craft of Singing (3 Credits)

Old Listing Effective Through Spring 2022:

Vocal and breathing anatomy and technique, vocal health and classifications, posture, and beginning acting/movement techniques for singers. INART 215 The Craft of Singing (3) (GA) Vocal and breathing anatomy and technique, vocal health and classifications, posture, and beginning acting/movement techniques for singers. Anatomy of the larynx and respiratory system are studied and strengthened through in-class work on vocal and breathing exercises. Focus will be on good tone production and resonance. Aspects of vocal health, voice classification, and basic differences between Classical and Musical Theatre vocal styles are introduced. Techniques that enhance and develop acting and movement choices are also studied through individual and group exercises and through the performance of songs.

Changes Effective Summer 2022:

- Add BA Designation
- Change to MUSIC 215
- Description

IST 256: Programming for the Web (3 Credits)

Old Listing Effective Through Spring 2022:

IST 256 will provide students with the knowledge and skills to create both basic and more dynamic web-based content pages and applications. The course will first focus on acquiring competencies in core web development languages including HTML, CSS, and JavaScript, then move on to more advanced topics such as information architecture, incorporation of multimedia, and the use of application programming interfaces (APIs) and application development frameworks for the web. The course will follow an active learning pedagogy and incorporate a substantial project component. The first part of the course consists of introduction of web programming concepts, techniques, and tools. Students will demonstrate understanding of the course content by building web pages via individual and group activities. The latter half of the course will involve more in-depth project work both as individuals and in groups.

Prerequisites: Enforced Prerequisite at Enrollment: IST 250 or IST 242

Changes Effective Summer 2022:

- Prerequisites

LER 83S: First-Year Seminar in Labor and Human Resources (3 Credits) (BA)

Old Listing Effective Through Spring 2022:

LER 83S meets the Bachelor of Arts degree requirements. This course provides a general introduction to the field of labor, employment relations, and human resources, as well as a more in-depth examination of an issue or topic related to the field and it does so in a small class environment. It also introduces first-year students to the University as an academic community, to their responsibilities as a member of that community, and to the wide range of the opportunities and resources available to them. The course fulfills both a firstyear seminar and a general education or Bachelor of Arts social/behavioral science requirement. Class sessions stress discussion of assigned readings, debates, and/or talks by guest lecturers/speakers.

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description

LER 165N: Work and Literature (3 Credits)

Old Listing Effective Through Spring 2022:

If you get a job out of college, work eight hours a day, fifty weeks a year, and retire at age 65, at that point you have will spent roughly one third of your adult, waking life at work. And that is just paid work. Add in housework, childcare, and other forms of unpaid labor and the share of your waking hours devoted to work creeps closer to one half. And those calculations may actually underestimate the influence work has over your life. What you do will determine where you live, how you live, and, perhaps, whether you believe you have ultimately done something meaningful with your life. With work playing such an outsized role in life, you may as well understand it as best you can. Hence this class. In it, we approach the question of work from the perspective of two disciplines: labor and employment relations and literature. The field of labor and employment relations asks about the social and economic forces-markets, compensation, globalization, immigration, etc.-that shape work. By contrast, the discipline of literature takes a more subjective approach to the question of work. Very broadly speaking, it shows how the forces that shape work play out in individual lives. In short, it shows how individuals feel about the work they do or, in the case of the unemployed, they do not do. Together, the two disciplines provide a global
and personal perspective on one of the most important parts of our lives. Students registering for the course will read representative selections from both domains, engage in course discussions, take exams, and write essays as they explore the variety of ways both labor and employment relations and Literature can prepare them for their work lives and help them understand the place of work in culture and society.

Changes Effective Summer 2022:

- Change Abbreviation to LHR

LER 201: Employment Relationship: Law and Policy (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Most Americans spend a third of their adult lives at work. This course examines the legal rights and rights and obligations of employers and employees in U.S. workplaces. No previous course in law is necessary. The course begins with an overview of general legal concepts necessary to an understanding of the US legal system. That sets the stage for an examination of the employment contract, a cornerstone of employment law. The main body of the course examines such topics as sexual harassment, drug testing, wage and hour regulation, immigration, health care, pregnancy, family leave, workers' compensation, employee privacy, and unionization. This introduces students to landmark federal and state employment statutes, regulations, and cases. As students learn about workplace rights and obligations, they discuss the public policy issues underlying most debates. Throughout, students are encouraged to argue policy questions from the different perspectives of employers, employees, and the public. Being both "employee-" and "employer-centric," the course is designed for the generalist as well as the major in the field. Thus, its content helps to prepare literally any future employee with vital liberal arts and career-related knowledge, while at the same time providing a foundation for students who choose to specialize in human resources or labor relations.

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description

LER 202: Understanding Employee Behavior (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

The course will be offered at an introductory level. It is designed to encourage students to explore individual and group behavior at work. The ability to describe, explain and analyze concepts in this course is critical to appreciating the dynamics that determine organizational outcomes. In this context, students will learn basic tools that will assist them in developing management, supervisory and leadership skills. Because the concepts from this course are the foundation of human resource management and employee relations, it is essential to master them in order to be an effective human resource management or employee relations professional. The conceptual learning in the course will include individual differences, diversity, attitudes, fairness perceptions, motivation, decision making, leadership, teams, negotiation, organizational culture and its role in the external context.

Changes Effective Summer 2022:

- Change Abbreviation to LHR

LER 304: Labor and Employment Relations Fundamentals (3 Credits)
Old Listing Effective Through Spring 2022:

The course surveys the main elements of modern labor and employment relations systems in the U.S. and beyond. The course encourages students to use a framework for evaluating workplace outcomes according to three yardsticks: efficiency; equity; and voice. Focusing primarily on employee voice, the course introduces students to a variety of mechanisms that bring democracy, worker engagement, and worker influence to the workplace. Among these mechanisms are U.S.-styled collective bargaining, non-union systems of worker involvement, European works councils, and a new variety of "alt-labor" initiatives from around the world. In its single largest unit, the course focuses on U.S. workplaces, beginning with the historical and legal foundations of the modern U.S. labor relation system. This includes units examining union organizing campaigns, collective bargaining, and dispute resolution systems. Concluding weeks of the course look at issues surrounding the push for workplace flexibility, a comparative labor relations look at other country practices (include European works councils), emerging issues in global supply chains, "alt-labor" institutions and practices, the role of gender, race, and diversity initiatives at work, and the impact of automation and artificial intelligence on the future of work.

Prerequisites: LER 100

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Prerequisites

LER 305: Human Resources Fundamentals (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

This course will provide students with an opportunity to understand and apply important concepts concerning human resources in the workplace. Students will learn to think of the issues in the class from both the employees’ and organizations’ perspectives. The course begins with a description and analysis of the role human resource managers play in supporting employees’ personal needs as well as an organization’s strategic objectives. The discussion traces the changes in that role historically, as well as the contemporary understanding of HR’s part in helping stakeholders succeed. Against this backdrop, students will study three critical variables affecting HR’s involvement in management: the individual; the organization; and, the law. Each of these foci illustrates variables with which HR managers must contend. The course presents these variables through a variety of lenses: law, psychology, sociology, history and literature. Students will also spend considerable time studying the various functions HR plays in recruiting, selecting, training, evaluation, compensation, labor relations and safety. In these portions of the class, students will learn to understand the functions not only from the organization’s, but also from the employees’ perspective. The discussion of functional areas will end with application of the concepts studied to the global business environment in which HR increasingly operates. Throughout students will not only learn the mechanics of, for example, the selection process, but how processes support an organization’s and individual’s pursuit of their unique purposes. Consistent with the liberal arts environment in which LER students enroll, the final project requires students to apply the concepts learned concerning the HR function to their everyday lives, helping students to reflect on the difference HR processes can have on both the organization but equally important on the employee. As a Gen Ed course (GS), the course qualifies as a Bachelor of Arts (B.A.) course consistent with the B.A. Fields category.

Prerequisites: LER 100
Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 312: Employment Relations to Research Methods in Labor and Employment Relations (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

The objective of this course is to enhance students’ abilities to use a range of methodologies to evaluate and conduct research in the field of employment relations and human resource management. LER 312 Employment Relations to Research Methods in Labor and Employment Relations (3)(BA) This course meets the Bachelor of Arts degree requirements. The objective of this course is to enhance students’ abilities to use a range of methodologies to evaluate and conduct research in the field of employment relations and human resource management. It covers core concepts such as the scientific method, literature search, the logic of hypothesis formulation and testing, measurement, sampling and data collection methods, and basic statistical analysis. To accomplish these objectives, the course utilizes readings, lectures, class discussions, exercises and assignments, student presentations, and examinations.

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description

LER 400: Comparative Employment Relations Systems (3 Credits) (IL) (BA)
Old Listing Effective Through Spring 2022:

Analysis of structure and elements of employment relations systems in developed and developing areas. LER 400 LER 400 Comparative Employment Relations Systems (3) (IL)(BA) This course meets the Bachelor of Arts degree requirements. This course explores contemporary topics in employment relations in the world. The course examines seven examples of employment relations systems, each carefully chosen to illustrate important variations in employment relations practices. It also provides an overview of economic globalization and its impact on employment relations. Topics include global sweatshops, child labor, the diffusion of human resource practices, and corporate social responsibility. The first country case is Germany, which provides an example of a country with strong national unions and a highly developed system of works councils. The Swedish case exemplifies a long-tradition of centralized bargaining and tripartite relations that is now in transition. The third case, Japan, illustrates some of the initial experiences with team work, just-in-time production, and employee commitment through job security and training. China offers an example of a socialist system in transition that has become an economic powerhouse through massive export processing zones, government controlled unions, and wage competition. Brazil provides an important example of a Latin American country with a state dominated employee relations system. South Africa offers a case of highly politicized employment relations in a country in transition from extreme racial segregation to a democracy. Finally, India represents Asia’s other economic powerhouse, with an English speaking workforce that is drawn alongside the diffusion of high-end human resource practices in Brazil. In this section, student will also study inter-governmental institutions such as the World Trade Organization, and the International Monetary Fund. The final unit of this section examines the topic of Corporate Social Responsibility (CSR), recent attempts by corporations -at times in coordination with labor unions–to establish basic sets of rules or standards for their employees wherever units of the corporation might be located in the world today.

Prerequisites: 3 credits in Labor and Employment Relations

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 401: The Law of Labor-Management Relations (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Development of Anglo-American law regulating collective bargaining, with emphasis on American labor-management relations under Wagner, Taft-Hartley, and other acts. LER 401 The Law of Labor – Management Relations (3)(BA) This course meets the Bachelor of Arts degree requirements. This course will examine the evolution of labor law in the United States. The N.L.R.A. itself, and the decisions of the National Labor Relations Board (N.L.R.B) and the courts, will be examined in order to gain an understanding of the current legal framework underpinning our system of labor-management relations. Major issues to be examined include the rights of employees to union representation; the formation of bargaining units; the conduct of organizing campaigns and elections; the duty to bargain; strikes, striker's rights, and lockouts; picketing, boycotts, and related activity; the enforcement of collective bargaining agreements and the duty to arbitrate; union members’ rights and responsibilities, the duty of fair representation; and federal-state relationships in labor relations. Also covered in the course will be the legal framework for public sector labor-management relations, with specific attention paid to Pennsylvania Acts 111 and 195. The course will be taught from a liberal arts perspective, meaning that societal factors influencing the law–history, politics, and economics –will be emphasized. Student performance will be evaluated by means of tests, short papers, and such reports as may be required. This course is complementary to others in Labor Law, including LER 434, Collective Bargaining and LER 435 Labor Relations in the Public Sector. The course requires no special facilities or equipment; however, students enrolled are expected to have computer skills sufficient for communication and word processing purposes.

Prerequisites: 3 credits in Labor and Employment Relations or Political Science

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 403: International Human Resource Studies (3 Credits) (IL) (BA)
Old Listing Effective Through Spring 2022:

Course exploring human resource management from an international perspective. LER 403 International Human Resource Studies (3) (IL)(BA) This course meets the Bachelor of Arts degree requirements. This course on International Human Resource Management expands beyond the traditional disciplines of HRM through a broader consideration of the
impact of national contexts on these areas of organizational practice. The first question addressed is whether ‘HRM’ actually means the same thing in different countries, especially given that the term ‘HRM’ was developed from US management practice and scholars. This opens the discussion as to how institutions and culture at the national level help to shape management practice. As organizations become increasingly global, these issues of national culture and institutions can often stand in the way of a seamless progression of HRM across national boundaries. From a national culture perspective, the course compares how people in different countries see themselves and others around them, and how expectations, values and beliefs can differ in the workplace. This understanding is drawn from frameworks of national culture which describe the culture’s multiple dimensions. This enables students to identify why and how it may be different working with colleagues from other cultures, as well as understanding the implications this can have for designing appropriate HRM practices. From a national institutions perspective, the course compares how institutions such as legislation, state intervention, trade union influence, education systems, and the respective power of shareholders versus stakeholders can impact on patterns of HRM and employee relations practices in different countries. For example, comparisons are made between economies with very high levels of employment regulation, explaining local employee rights and benefits, and those in which firms have more autonomy to choose how to manage their employees. From a strategic perspective, the course looks at how multinational enterprises are managing this cultural and institutional complexity, making strategic choices in international HRM to ensure they achieve the ultimate balancing act of thinking global but acting local. It considers different strategies firms might take (from complete standardization of HRM to complete localization) and how this then translates into different roles and activities for the HRM function. This section also explores how these firms manage their international staff (expatriates), as well as finally exploring ethical issues around outsourcing activities to lower-cost countries, and the impact of a more globalized workforce on diversity and work-life balance issues.

Prerequisites: LER 100

Changes Effective Summer 2022:
- Change Abbreviation to LHR
- Description
- Prerequisites

LER 409: Leadership Development: A Life-Long Learning Perspective (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

The course examines the continuing influence of social and environmental factors in shaping leadership and leadership development. LER (OLEAD) 409 Leadership Development: A Life-Long Learning Perspective (3)(BA) This course meets the Bachelor of Arts degree requirements. Current social conditions, such as financial crises, ineffective solutions to local, national, and international problems and corrupt leaders, call for more effective and ethical leadership on a broad scale. The positive and moral transformation of social institutions requires active participation and leadership of more authentic transformational leaders. This course will discuss authentic transformational leadership development from a life span developmental perspective. More specifically, it will focus on how an individual develops his/her leadership skills, potential, and capacity in his/her childhood, school, social organizations, colleges, and work organizations. The primary purpose of this course is to help students understand how family, educational, and other environmental factors have helped and/or will help them develop their transformational leadership potential and leadership effectiveness, in addition to gaining a better understanding of their strengths and weaknesses in respect to personality, individual difference, motivation, values, emotions, self-awareness, and identity. The fundamental objectives of this course are to help students 1) increase self-awareness; 2) to help students to know more about their sense of self, including self-identity, self-awareness, self-efficacy, and other types of self concepts; 3) to understand the effect of life span influences in an individual’s leadership development.

Prerequisites: Prerequisites: OLEAD 100 or 6TH Semester Standing

Changes Effective Summer 2022:
- Change Abbreviation to LHR
- Description
- Prerequisites

LER 426: Staffing and Training Strategies in Organizations (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

This course focuses on the theory and practice of human resource staffing and training in organizations. It provides the conceptual framework for understanding the staffing and training function as a factor of production and service. For this we will discuss policies and practices designed to attract, retain, and motivate employees. It explains how staffing and training can be used as a competitive weapon. For this we discuss how human resource policies and practices can be targeted towards achieving business objectives. This should inspire you to think of the connection between employee effectiveness and profitability. The course also provides the government regulations that impact staffing and training practices. The course uses lectures, group discussion, and in-class exercises to impart these concepts.

Prerequisites: LER 100

Changes Effective Summer 2022:
- Change Abbreviation to LHR
- Prerequisites

LER 427: Organizational Context for Human Resource Management and Employment Relations Professionals (3 Credits)
Old Listing Effective Through Spring 2022:

This course examines human resource management (HRM) and employment relations (ER) from a strategic perspective embedded in a complex and evolving organizational system. To be effective, students must understand how different organizational strategies interface with the entire set of HR/ER practices put in place. This approach also requires an ability to connect business functions, governance, organizational metrics and financial considerations with investments in the broader HR/ER system. The goal of this course is to build business acumen by providing a foundational understanding of the components of a strategic and proactive HR/ER system. Through active learning, this course will encourage the development of analytical skills, personal competencies, and in-depth understanding of how various HRM and ER parts work together to shape organizational success. Students are more effective in their roles when they understand organizational strategic typologies, business functions, and governance structures that can affect the structure and implementation of the HRM/ER functions. Other topics include vertical and horizontal integration of the supply chain, and mergers and acquisitions, both of which are
important to the work context. Basic finance and accounting concepts relevant to HRM/ER such as profit and loss statements, balance sheets, and cash flow enable students to understand how managers and leaders make resource decisions. Students gain credibility with other organizational decision makers by better understanding concepts such as earnings per share, return on assets (ROA) and return on investment (ROI). Understanding the time value of money and implications for decisions regarding investments in people enables students to be more effective in decision-making roles. The goal is to provide students with the fundamentals of the business context as relevant to their roles as HRM and ER professionals. The use of metrics and measures to provide feedback to the organization and individual employees will be examined. The criticality of understanding appropriate metrics and the importance of finding or creating valid, reliable, and bias-free metrics is explored. Learning how to create balanced score cards and associated HRM/ER scorecards can provide actionable insight to all organizational stakeholders. Finally, exposure to conceptual frameworks related to ethics and risk assessment will enable students to apply such frameworks in an organizational context. The goal is to have HRM and ER students develop a deep understanding of perspectives, practices, and tools that connect HRM and ER policies and practices to an organization's context and strategy.

Prerequisites: LER 100 AND LER 305

Changes Effective Summer 2022:

• Change Abbreviation to LHR
• Title
• Abbreviated Title
• Prerequisites

LER 435: Labor Relations in the Public Sector (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Analysis of labor relations problems within different areas of public employment. LER 435 LER 435 Labor Relations in the Public Sector (3)(BA) This course meets the Bachelor of Arts degree requirements. Upon completing this course, students should be able to identify the legal frameworks that govern collective bargaining between employers and unions in federal, state and local governments. Students should also be able to explain the process of collective bargaining in the government sector and the special circumstances that make public sector bargaining different from private sector bargaining. At course end, students should be able to identify the parties involved in public sector bargaining, including those involved in dispute resolution, and explain their priorities in the labor relations process. Students should come to understand and articulate the reasons why it is important to study and more fully comprehend the public sector labor relations process. Together, we will explore the distinctions between public and private sector employers that impact labor relations in the public sector, in order to better understand those distinctions. Also, we will explore the principal historical differences between negotiations in the public and private sectors, in order that students can better articulate those differences. In addition, we will work to understand the principal arguments for and against the right to strike for public sector employees, as well as other impasse resolution processes. Finally, we will work to identify and discuss the challenges facing public sector labor relations in the near term and in the intermediate term.

Prerequisite: 3 credits in Labor and Employment Relations

Changes Effective Summer 2022:

• Change Abbreviation to LHR
• Description
• Prerequisites

LER 437: Workplace Dispute Resolution (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Dispute resolution practices and procedures used in the workplace and employment law settings. LER 437 LER 437 Workplace Dispute Resolution (3)(BA) This course meets the Bachelor of Arts degree requirements. This course examines dispute resolution procedures in unionized and nonunion workplaces. The course begins with an examination of grievance procedures in unionized workplaces and the system of labor arbitration. Students will read labor arbitration decisions and learn how to research arbitration issues. The second major theme of the course is an examination of the design and use of nonunion workplace dispute resolution procedures. Students will read descriptions and analyses of examples of nonunion grievance procedures. Finally, the course will look at procedures for resolving employment law disputes and the major public policy debates surrounding mandatory nonunion arbitration procedures. Students will read some of the major legal cases in this area of the law and perspectives both for and against mandatory arbitration. A key objective of the course is to enable students to both understand and think critically about different alternative dispute resolution procedures and their role in employment relations. As part of achieving this objective, the course will include simulated dispute resolution exercises to provide students with experience in using techniques such as arbitration, mediation, and peer review. Additional course requirements include regular class attendance and participation, and paper assignments based on each of three main sections of the course. This course builds on and is complementary with other coursework in Labor and Employment Relations in the areas of employment relations, employment and labor law, and human resource management. It also complements courses in other departments in the area of dispute management and resolution, including the Minor in Dispute Management and Resolution. LER 437 may also be taken as an elective by students in the MS in Human Resources and Employment Relations and compliments coursework in the graduate program.

Prerequisite: LER 100 LER 110 or 6th Semester standing

Changes Effective Summer 2022:

• Change Abbreviation to LHR
• Description
• Prerequisites

LER 444: Workplace Safety and Health: Principles and Practices (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

The role of employees, unions, employers, and government in dealing with work-related safety and health issues. LER 444 Workplace Safety and Health: Principles and Practices (3)(BA) This course meets the Bachelor of Arts degree requirements. Workplace Safety and Health: Policies and Practices focuses on the roles of employees, unions, employers, and government in addressing work-related safety and health issues. The course will introduce students to the three interrelated fields of workplace safety, workplace health, and environmental protection. Students will be provided with an overview of key issues within these fields and gain an appreciation for their importance within the workplace. Students will
also become familiar with the fundamental concepts involved in the management of workplace safety and health issues. LER 444 satisfies requirements within the Labor Studies and Employment Relations major and may be taken as an elective. LER 444 is complementary to other courses dealing with employee relations and legal principles within the workplace.

Prerequisite: LER 100 or sixth-semester standing

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 458Y: History of Work in America (3 Credits) (WF) (US) (BA)
Old Listing Effective Through Spring 2022:

A study of selected problems in the history of work in the United States, especially since 1877.

Cross-Listed Courses: HIST 458Y
Prerequisite: HIST 021, HIST 156, or LER 100

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 464: Communication Skills for Leaders in Groups and Organizations (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

This course meets the Bachelor of Arts degree requirements. LER 464 Communication Skills for Leaders in Groups and Organizations is a survey of theory, research, and practice related to the communication processes by which individuals in groups and organizations exercise influence, whether or not they occupy positions of acknowledged leadership, and may be taken as part of an Labor and Industrial Relations major or minor, or as an elective by students in other disciplines. The course is offered once each academic year and has an enrollment limit of 40 students per offering. The course requires no special facilities. LER 464 extends to other courses in the major, primarily in the areas of Industrial Relations and Human Resources. It is also complementary to courses dealing with decision making in groups and organizations in sociology, psychology, and management. Of particular interest are decision making practices, as well as theories that account for them, in single-motive situations (in which participants in the process are pursuing a common goal) and mixed-motive situations (in which two or more of the participants are competitively related, but must cooperate to achieve their objectives). Hence, the course deals both with (1) conventional decision making, as in the case of boards, task forces, problem-solving groups, and quality circles or teams, appropriate to single-motive situations and (2) processes, such as bargaining, negotiation, and dispute management/resolution, appropriate to mixed-motive situations. The course also deals with the influence of organizational culture on decision-making in both types of situations. Upon completing LER 464, students will have been exposed to a broad array of theoretical perspectives on decision making in groups and organizations, will be familiar with research testing these theories, and be aware of decision making practices suggested by theory and research that are useful in situations requiring collective choice and action. These terminal outcomes of the course reflect the objectives.

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 465: Collective Decision Making (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

Application of theories of decision making to work-related issues in groups and organizations requiring collective resolution and action. LER 465 Collective Decision Making (3) (BA) This course meets the Bachelor of Arts degree requirements. This course presents a broad overview of theories, research, and practices in decision making as related to work-related choice making in groups and organizations and is open to students majoring or minoring in Labor and Industrial Relations, as well as to students who may wish to use the course as an elective. The course is offered once each academic year and has an enrollment limit of 40 students per offering. It requires no special facilities. LER 465 extends to other courses in the major, primarily in the areas of Industrial Relations and Human Resources. It is also complementary to courses dealing with decision making in groups and organizations in sociology, psychology, and management. Of particular interest are decision making practices, as well as theories that account for them, in single-motive situations (in which participants in the process are pursuing a common goal) and mixed-motive situations (in which two or more of the participants are competitively related, but must cooperate to achieve their objectives). Hence, the course deals both with (1) conventional decision making, as in the case of boards, task forces, problem-solving groups, and quality circles or teams, appropriate to single-motive situations and (2) processes, such as bargaining, negotiation, and dispute management/resolution, appropriate to mixed-motive situations. The course also deals with the influence of organizational culture on decision-making in both types of situations. Upon completing LER 465, students will have been exposed to a broad array of theoretical perspectives on decision making in groups and organizations, will be familiar with research testing these theories, and be aware of decision making practices suggested by theory and research that are useful in situations requiring collective choice and action. These terminal outcomes of the course reflect the objectives.

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 494: Research Project (1-12 Credits: Maximum of 12 Credits) (BA)
Old Listing Effective Through Spring 2022:

Supervised student activities on research projects identified on an individual or small-group basis.

Changes Effective Summer 2022:

- Change Abbreviation to LHR
- Description
- Prerequisites

LER 494H: Research Project (1-12 Credits: Maximum of 12 Credits) (H) (BA)
Old Listing Effective Through Spring 2022:

Supervised student activities on research projects identified on an individual or small-group basis.

Changes Effective Summer 2022:
• Change Abbreviation to LHR

LER 495: Labor Studies Internship (1-12 Credits: Maximum of 12 Credits) (BA)
Old Listing Effective Through Spring 2022:
Supervised practicum in labor relations setting with union, management, or government agency.
Prerequisite: prior approval by department
Changes Effective Summer 2022:
• Change Abbreviation to LHR
• Prerequisites

LER 496: Independent Studies (1-18 Credits: Maximum of 18 Credits) (BA)
Old Listing Effective Through Spring 2022:
Creative projects, including research and design, which are supervised on an individual basis and which fall outside the scope of formal courses.
Changes Effective Summer 2022:
• Change Abbreviation to LHR

LER 497: Special Topics (1-9 Credits: Maximum of 9 Credits) (BA)
Old Listing Effective Through Spring 2022:
Formal courses given infrequently to explore, in depth, a comparatively narrow subject which may be topical or of special interest.
Changes Effective Summer 2022:
• Change Abbreviation to LHR

LER 499: Foreign Studies (1-12 Credits: Maximum of 12 Credits) (IL) (BA)
Old Listing Effective Through Spring 2022:
Courses offered in foreign countries by individual or group instruction.
Changes Effective Summer 2022:
• Change Abbreviation to LHR

MNG 412: Mineral Property Evaluation (3 Credits)
Old Listing Effective Through Spring 2022:
Ore reserve estimation using statistics and geostatistics, mine cost estimation, engineering economy concepts applied to mineral deposits.
Changes Effective Summer 2022:
• Description
• Prerequisites
• Concurrent

MUSIC 77: Philharmonic Orchestra (1 Credit: Maximum of 8 Credits) (BA)
Old Listing Effective Through Spring 2022:
Orchestra rehearsal and performance. MUSIC 077 Philharmonic Orchestra (1 per semester/maximum of 8) (GA)(BA) This course meets the Bachelor of Arts degree requirements. The goals of this course are to develop the instrumental performing skills, music reading abilities, and interpretive capabilities of the class members within a large symphonic orchestra context. The repertoire includes the standard literature from the 19th and 20th centuries as well as new music written for symphony orchestra. Students will be assessed by the use of performance evaluation and assessment of participation and contribution to established goals of the ensemble. The course is for students who have advanced performance skills on standard orchestral string, wind, and percussion instruments. An audition is required.
Prerequisites: Audition
Changes Effective Summer 2022:
• Add Travel Component
• Description
• Remove Prerequisites

PLET 222: Introduction to Plastics Processing (4 Credits)
Old Listing Effective Through Spring 2022:
Introduction to plastic processing methods, materials, tooling, design, and equipment. Safe operation and practices are emphasized. PL ET 222 Introduction to Plastics Processing (4) This course provides an introduction to plastics processing and is intended to provide broad foundational knowledge of the different types of plastics processing methods, equipment, and materials. The educational objectives are to develop competency in the determination of potential methods for manufacturing various component designs and the determination of cost effectiveness for the possible process alternatives selected. After completing this course, the student should have a basic understanding of a multitude of plastic processing methods and have knowledge of the interrelationship of part and tool design as it impacts manufacturing. The student should also understand materials and material flow phenomena as it affects processing and should understand the processing and troubleshooting techniques typically found in the industry.
Enforced Prequisite at Enrollment: PLET 205
Changes Effective Summer 2022:
• Remove Enforced Prerequisites
• Add Concurrent

PLET 323: Packaging Processes (3 Credits)
Old Listing Effective Through Spring 2022:
In-depth studies and laboratory experiments will be conducted on processes such as blow molding, thermoforming, extrusion, and rotational molding, and other packaging processes. PLET 323 Packaging Processes (3) In this course the student will learn about plastic packaging processes of blow molding, thermoforming, extrusion. Other minor processes will be presented. The course objectives are to develop student proficiencies in identifying the polymer material requirements for each process, in identifying the mold design and construction techniques for each process, and knowing how plastic packaging processes differ from injection molding. The laboratory will include experiments that show the advantages of each process and to develop student competency in running equipment for each process explored. The students shall also develop competency in conducting elementary process troubleshooting for each process. Student competency is assessed by graded lab reports and projects.
Prerequisites: PLET 227 AND PLET 304
Changes Effective Summer 2022:

- Add Concurrent

**PLET 345: Heat Transfer (2 Credits)**

Old Listing Effective Through Spring 2022:

Fundamentals of heat transfer including conduction, convection, and radiation. PL ET 345 Heat Transfer (2) The course is intended to allow the student to develop the ability to conceptually evaluate heat transfer problems, and solve practical problems that might be encountered in the plastics industry including those that relate to energy management in plastic materials or processes. The course objectives are accomplished by establishing the concepts of the three principle mechanisms of heat transfer, solving plastics related problems illustrative of each mechanism, and reinforcing theoretical concepts learned through the use of simulation software and hands-on laboratory experiments. During this course students will build upon the knowledge gained in an earlier course in the thermal and fluid sciences. Student competency is assessed by graded quizzes, examinations, homework, and special assignments. The course is offered once per year with an enrollment of 40 to 50 students.

Enforced Prerequisite at Enrollment: PLET 366

Changes Effective Summer 2022:

- Credits

**PLET 464: Plastics Failure Analysis (3 Credits)**

Old Listing Effective Through Spring 2022:

Fundamentals of Plastics Materials Process and Design Failure Analysis. PL ET 464 Plastics Failure Analysis (3) This course is intended to give the student an introduction to failure analysis for plastic articles. Course objectives are to: provide methods for the identification of common failure problems associated with modern molded plastic parts, perform a causal analysis for each failure type, provide an introduction, instruction, and allow operation of several analytical tools used to establish failure mechanisms, and review the relevant polymer physics and chemistry concepts involved in failure analysis. During the course students will be using concepts studied earlier in plastic material properties and applications. Student competency is assessed by graded quizzes, examinations, homework, and special assignments. The course is offered once per year as a technical elective with an enrollment of 15 to 20 students.

Prerequisites: Enforced Prerequisite at Enrollment: PLET 30

Changes Effective Summer 2022:

- Enforced Prerequisites

**PNG 440W: Formation Evaluation (3 Credits) (WF)**

Old Listing Effective Through Spring 2022:

Study of those methods used to evaluate the engineering properties of oil and gas bearing reservoir formations.

Concurrent Courses: PNG 405, PNG 406

Changes Effective Summer 2022:

- Description

**PSYCH 230: Introduction to Psychologies of Religion (3 Credits) (BA)**

Old Listing Effective Through Spring 2022:

Introduction to major Western psychologies of religion (James, Freud, Jung) and to subsequent extensions of and departures from them.

Changes Effective Summer 2022:

- Description
- Prerequisites

**RADSC 295A: Radiologic Science Clinical Internship I (1.5 Credits: Maximum of 1.5 Credits)**

Old Listing Effective Through Spring 2022:

Supervised off-campus, non-group instruction including field experiences, practica, or internships. Written and oral critique of activity required.

Prerequisites: Enforced Prerequisite at Enrollment: RADSC 101 and RADSC 110

Changes Effective Summer 2022:

- Abbreviated Title
- Prerequisites
- Concurrent

**RM 440: Risk, Strategy, and Decision Making (3 Credits)**

Old Listing Effective Through Spring 2022:

To examine key strategic concepts, ranging from cognitive to organizational, that are critical for managing risk at the enterprise level. RM 440 Risk, Strategy, and Decision Making (3) One of the key ways that a business attempts to manage risk it anticipates and confronts in markets is through organizational-level elements such as its business strategy, structure, and culture. These elements emerge from a series of decisions guided by the insights and biases of individuals. As such, the management of enterprise risk must also include an understanding of how individuals (e.g. managers) approach risk through their decisions and decision making processes. In this course, we look at some of these critical elements separately and then together as they integrate to guide and define enterprise risk management. The basic course objectives are to come away with an understanding of the following: Forms of strategic risk – From market to internally-driven risk; from emotional to economic-driven, how does strategic risk present itself? How do executives recognize/assess and respond to the "portfolio of risk" that they must address to make the business successful? Business strategy and structure – One way risk is addressed and articulated is through a business strategy. What is strategy? What are the key decisions that comprise a business strategy? How are organizations structured to implement these strategies and move information across the firm? Where and how is risk assessed in these processes and structures, and incorporated into a strategic risk plan? Decision making – Decision making around strategy and risk management plays out in various forms and across different levels (i.e., individuals and groups). What goes right and wrong? How are these processes systematically linked to perceptions and actions associated with risk management. Organizational culture – Perhaps one of the most critical elements in enterprise risk management is the role played by organizational culture (or simply "how we do things around here and my role as an organizational member doing it.") We examine the roots of organizational culture and how it is aligned to perspectives of risk and its management. Descriptive vs. prescriptive perspectives – Once we
This course offers a comparative study of the literature, artistic manifestations, intellectual traditions, and cultural productions of Spain. This course offers a comparative study of the literature, artistic manifestations, intellectual traditions, and cultural productions of Spain. Depending on the semester focus, topics related to literary movements, comparative approaches to genre, and/or connections between textual representation and politics, social movements, and/or Spain’s long and complex history (both locally and globally) may be at the center of discussion. Additionally, varied issues of gender, race and ethnicity, rural and urban environments, religion, and evolving conceptions of nationhood may be included as overarching themes. Particular literary genres and representative works may be foregrounded in yet another iteration of the course, wherein students will study and discuss principal readings against cultural backdrops framed by exposure to art, film, music, and/or other historical, intellectual, sociopolitical, and/or media-based materials of relevance to the semester-specific context at hand.

Prerequisite: SPAN 200

Changes Effective Summer 2022:

• Remove Prerequisites

SPAN 354: Topics in Border Studies (3 Credits) (BA)
Old Listing Effective Through Spring 2022:

This course offers a study of borders as key sites of contact, exchange, conflict, hybridity, and identity production in and across varied contexts of Spanish, Latin American, and/or Latina/o culture(s). This course offers a study of borders – geopolitical, social, intellectual, literary, artistic, and/or historical – as key sites of contact, exchange, conflict, hybridity, and identity production in and across varied contexts of Spanish, Latin American, and/or Latina/o culture(s). While diverse variables (including diaspora, gender, race and ethnicity, sexuality, colonialism, nationhood and transnationalism) will inform particular iterations of the course, approaches and text selection will be shaped by an understanding of borders as constructs defined by conditions of dynamic interaction and transformation. Materials to be considered in the course, which will vary according the focus, may include literary, artistic, and intellectual works, film, mediabased texts, music, and/or historical documents.

Prerequisite: SPAN 200

Changes Effective Summer 2022:

• Remove Prerequisites

SUR 381: Stormwater Hydraulics and Hydrology (4 Credits)
Old Listing Effective Through Spring 2022:

Hydraulics: statics, continuity, energy, friction; hydrology: rainfall, abstractions, travel time, runoff; stormwater design: sewers, culverts, basins, erosion; municipal regulations. SUR 381 Stormwater Hydraulics and Hydrology (4) Stormwater Management Hydraulics and Hydrology is an elementary treatment of common design practices used to create stormwater management plans for small to medium sized land development projects. Erosion and sedimentation design is also addressed within the context of a stormwater management plan. The course is intended for engineering students who are not required to take formal fluid mechanics or hydrology courses, yet have a need to understand or complete the design aspects of stormwater management as it relates to their professional practice. Some state professional registration laws refer to this type of engineering design as "minor engineering" which is engineering design as it relates to land surveys
connected to land development activities. Other types of "minor engineering" include street alignment, sanitary sewers, water lines, utilities and site grading. The course contains three segments. The first segment covers the elementary hydraulics necessary to design drainage structures and storm water detention facilities. These topics include fluid statics, continuity, conservation of mass, conservation of energy, friction losses, minor losses, energy grade line, open channel flow, weirs and orifices. The second segment covers elementary hydrology methods used to analyze runoff from land development sites and small to medium watersheds. The hydrology topics include watershed characteristics, rainfall, abstractions, runoff, time of concentration, peak flow methods, hydrograph methods, basic channel routing and detention basin routing. The third segment covers government regulations and common design methods used to design storm sewers, detention basins and erosion control plans. A project includes the design of a multiplemodule storm sewer system, a stable open channel, a detention facility with a multiple outlet structure, and some erosion control measures.

Prerequisites: MATH 141, 6th semester standing; Concurrent: PHYS 213

Changes Effective Summer 2022:

- Remove Concurrent

Course Changes: Effective Fall 2022

AA 122: Introduction to Graphic Storytelling (3 Credits)
Old Listing Effective Through Summer 2022:

Introduction to Graphic Storytelling is a studio exploring the visual language of comics and graphic novels. Assignments will include writing and drawing exercises, and short and long-form comics projects. Students will study the formal concerns of visual sequence and storytelling, layout and lettering, and traditional drawing materials. Subjects of study and discussion will include contemporary comics and graphic novels, comprehensive critical response, creative ideation and development, and the history and theory of sequential art. Through exercises, projects, readings, discussion, and communal feedback, students will become develop their own visual and narrative process for producing graphic narratives.

Changes Effective Fall 2022:

- Add GA and BA attributes
- Change Description

AED 489: Advanced Practicum (3 Credits)
Old Listing Effective Through Summer 2022:

Supervised observation, unit planning, and teaching in Saturday Morning Arts School: analysis of creative expressions and art programs for learners.

Prerequisite: Enforced Prerequisite at Enrollment: AED 401. Enforced Concurrent at Enrollment: AED 490

Changes Effective Fall 2022:

- Credits
- Description

ARMY 101: U.S. Army Organization and Functions (2 Credits)
Old Listing Effective Through Summer 2022:

Introduction to U.S. Army and ROTC: their organization, missions and functions; customs and traditions; leadership laboratory.

Changes Effective Fall 2022:

- Credits
- Titles
- Description

ARMY 102: The Military Profession: Leadership and Management Theory (2 Credits)
Old Listing Effective Through Summer 2022:

Introduction to leadership techniques and basic management skills; leadership laboratory.

Changes Effective Fall 2022:

- Credits
- Abbreviated Title
- Description

ARMY 203: Army Operations: Tactics and the Principles of War (2 Credits)
Old Listing Effective Through Summer 2022:

Supervised observation, unit planning, and teaching in Saturday Morning Arts School: analysis of creative expressions and art programs for learners.

Prerequisite: Enforced Prerequisite at Enrollment: AED 401. Enforced Concurrent at Enrollment: AED 490

Changes Effective Fall 2022:

- Course Number to 201
- Credits
- Titles
- Description

ARMY 204: Land Navigation: Topographic Maps and Orienteering (2 Credits)
Old Listing Effective Through Summer 2022:

Military and topographic maps; methods of orienteering and land navigation; leadership laboratory.

Changes Effective Fall 2022:

- Course Number to 202
- Credits
- Titles
- Description

ARMY 301: Advanced Principles of Leadership and Management (3 Credits)
Old Listing Effective Through Summer 2022:

Principles of military leadership; military skills development; land navigation; physical fitness; leadership laboratory.

Changes Effective Fall 2022:

- Titles
- Description
ARMY 302: Advanced Principles of Military Leadership and Combat Operations (3 Credits)
Old Listing Effective Through Summer 2022:

Leadership in the field; principles of offense, defense, and patrolling; physical fitness, leadership laboratory.

Changes Effective Fall 2022:

• Long Title Description

ARMY 401: Organizational Behaviors: Interrelationships of Directing Staffs and Staff Functions (3 Credits)
Old Listing Effective Through Summer 2022:

Leadership; command and staff functions; ethics and professionalism; military writing; leadership laboratory.

Changes Effective Fall 2022:

• Titles
  • Description

ARMY 402: Army Personnel Management and Logistics (3 Credits)
Old Listing Effective Through Summer 2022:

Leadership; army personnel management; logistics system; personnel counseling; military justice; Soviet military; personal affairs; training management; army life; leadership laboratory.

Changes Effective Fall 2022:

• Titles
  • Description

CAMS 12: Lands of the Bible (3 Credits) (IL) (BA)
Old Listing Effective Through Summer 2022:

Utilizing the textual and archaeological evidence, this course introduces students to the lands, cultures, and peoples associated with the Hebrew Bible, New Testament, and Qur’an. Geographically, the lands of the Bible encompass what is often referred to as the Cradle of Civilization or Fertile Crescent — an arc-shaped region defined by the Nile, Jordan, Tigris and Euphrates river valleys. Today this crescent includes the modern countries and regions of Egypt, Israel, the Palestinian territories, Jordan, Syria, southeastern Turkey, and Iraq. Spanning ten millennia of history (ca. 9000 BCE-750 CE), this course explores a series of landmarks in the history of human development, which are considered together with Jewish, Christian, and Islamic traditions. These include the birth of religion and the agricultural revolution (Garden of Eden), the first cities and the invention of writing (Tower of Babel; Patriarchal/Matriarch traditions), Egyptian imperial rule in Canaan (Exodus), the collapse of the Bronze Age (Emergence of Israel), impact of empire (united and divided kingdoms of Israel and Judah), Alexander the Great and the Roman imperial expansion to the east (world of Jesus and development of rabbinic Judaism), Byzantine Palestine (expansion of Christianity), and the Islamic conquest of the Holy Land. Through an integration of numerous disciplines, including historical geography, archaeology, ancient history, biblical studies, epigraphy, and anthropology, students will investigate the interaction between the cultures of the ancient Near East and the religious traditions that developed in the lands associated with the Bible, a relationship that continues to shape the region and the world until today.

Changes Effective Fall 2022:

• Titles
  • Prerequisites

Cross-Listed Courses: JST 12 RLST 12

COMM 282: Television Field Production (3 Credits)
Old Listing Effective Through Summer 2022:

COMM 282 Television Field Production (3) COMM 282 provides an introduction to the pre-production, production and post production techniques when creating video content. The course will explore the grammar and syntax of constructing and criticizing video messages in single camera productions. Students will apply shooting and editing concepts while doing a variety of projects typical of single camera shoots. Students will learn the particulars of single camera production from the textbook, the lectures, discussions and classmates' experiences. While learning the technical aspects of video production, the students will learn the managerial aspects of production. Students will practice and apply the processes of budgeting, topic and location research, script writing, production treatments, dealing with unions, releases, etc.

Changes Effective Fall 2022:

• Titles
  • Description

COMM 283: Television Studio Production (3 Credits)
Old Listing Effective Through Summer 2022:

Students will learn the technical aspects of multi-camera studio television production. COMM 283 Television Studio Production (3) Communications 283W is an advanced video course. The course builds on the principles learned in Communications 282. The purpose of this course is two fold. The first goal is to learn the technical aspects of multi-camera (studio) television production. Students will learn how to brainstorm ideas, write program proposals, treatments and scripts for various formats of television studio production. Incorporated in the technical aspects of the class, the students will learn how to produce and direct a studio production. They will also learn all the crew positions in a television studio production including audio, teleprompter, technical director, assistant director, videotape, floor manager, character generator operator and camera crew. The second goal of this course is to apply the grammar and syntax of constructing and criticizing video messages to multi-camera television productions. Students will apply shooting, producing and directing concepts while doing a variety of projects typical of multiple-camera shoots. They will learn the particularities of multicamera television production from lectures, discussions and their own experiences.

Prerequisites: Enforced Prerequisite at Enrollment: COMM 282 or COMM 242

Changes Effective Fall 2022:

• Titles
  • Prerequisites

Using this Bulletin: 21
COMM 360: Radio Reporting (3 Credits)

Old Listing Effective Through Summer 2022:

Reporting, writing, producing, and presenting radio news programs, focusing on the development of news judgment and writing skills. COMM 360 Radio Reporting (3) COMM 360 provides an introduction to broadcast news writing and radio production. Students take this course after they have completed an introductory print reporting course but before they take advanced courses that focus on television news production. This course is designed to introduce students to the general principles of broadcast writing used in both the radio and television mediums. As a prerequisite for 400-level courses, COMM 360 is offered on a regular basis to allow students to complete curricular requirements in a timely manner. Students learn the techniques needed to report, write and produce radio news. During the semester, students report on news and learn to produce, anchor and engineer a newscast. Learning objectives for COMM 360 are that students: * demonstrate an understanding of professional ethical principles in news reporting and apply those principles in newsgathering; * demonstrate basic proficiency in the tools used to report and produce broadcast-quality radio news; * demonstrate the ability to write news for a broadcast format; * demonstrate the ability to produce quality work on deadline; * apply an understanding of news values in the creation of a newscast; and * demonstrate the ability to supervise other students in a working newsroom. Students work together in a broadcast facility to produce a radio newscast. They are evaluated throughout the semester on their ability to integrate skills and concepts they learn into their broadcast stories. Upon successful completion of the course, students will have learned the theories and skills at the core of their broadcasting profession.

Prerequisites: Enforced Prerequisite at Enrollment: COMM 260W

Changes Effective Fall 2022:

- Long Title
- Prerequisites

COMM 383: Advanced Video Production (1-3 Credits)

Old Listing Effective Through Summer 2022:

Advanced video production techniques and production management issues. COMM 383 Advanced Video Production (1-3) This course uses rotating topics to teach advanced video and television production techniques. Building on the concepts and skills taught in the introductory production course, students will learn advanced techniques in production budgeting, preproduction planning, location scouting, logistics, advanced lighting and audio techniques, post-production techniques, video formats and distribution issues. Each semester the instructor will choose an appropriate project that will serve as the focus of the course. Projects that occur outside the studio will include logistical issues such as power supply and safety and environmental considerations. Examples of projects include coverage of live sporting events, development of scripted and non-scripted programs, and exploration of alternative distribution platforms via the Internet and alternative telecommunications networks.

Prerequisites: Enforced Prerequisite at Enrollment: COMM 283

Changes Effective Fall 2022:

- Credits
- Titles

COMM 384: Telecommunications Promotion and Sales (3 Credits)

Old Listing Effective Through Summer 2022:

Principles of marketing services applied to telecommunications and information products/services; models of customer-focused selling and their applications to media time sales. COMM 384 Telecommunications Promotion and Sales (3) The two-fold objective of this course is learning the foundations of service marketing and achieving technical proficiency in applying models of customer focused selling. The context is the ever-changing marketplace for voice, video, and data services in computing, telephone, broadband (cable) and broadcasting. Topics covered include principles of services marketing and of customer-focused selling, electronic marketing, distribution and sales, selling media advertising products, (television, radio, Web), niche position marketing for voice, video and data services, marketing and advertising trends in Ecommerce. Classroom time is devoted to lecture, discussion, team activities and presentations. Other course work may involve online discussion groups and other forms of electronic distributed learning, creating and presenting sales presentations to actual clients and study by case method.

Prerequisites: Enforced Prerequisite at Enrollment: COMM 180 or COMM 320

Changes Effective Fall 2022:

- Titles
- Description
- Prerequisites

COMM 450A: Search Engine Marketing (3-3 Credits: Maximum of 3 Credits)

Old Listing Effective Through Summer 2022:

This project-oriented course provides students with the knowledge and skills necessary to conduct a sponsored research and keyword advertising-based marketing campaign. This course offers the students an opportunity to gain knowledge and hands on experience on sponsored search and keyword advertising. In this course, students will gain knowledge and skills to advertise products and services using keyword advertising. Strategies for developing successful advertising campaigns will be discussed, including targeting potential customers based on the geo-location, applying A/B testing to identify the feasible advertising set-up, and organizing keywords with various products and services for effective management. In addition, various tools will be introduced to students for facilitating efficient and effective performance. By participating in a firm-based project, the students will acquire the experience of business consulting for advertising using current web-based techniques.

Cross-Listed Courses: IST 450A

Prerequisites: Enforced Prerequisite at Enrollment: COMM 310 or IST 310

Changes Effective Fall 2022:

- Abbreviated Title
- Description
- Prerequisites
CSD 444: Introduction to Organic Disorders of Speech and Language (3 Credits)
Old Listing Effective Through Summer 2022:

Etiology, diagnosis, and principles of treatment of stuttering, and of speech-language disorders having organic bases. CSD 444 CSD 444 Introduction to Organic Disorders of Speech and Language (3) The course is required for Communications Sciences and Disorders majors, and should be taken during the third or fourth year. The intent of this course is to provide students with a basic understanding of stuttering, related fluency disorders, and other organic disorders. The course is designed to facilitate critical thinking through problem solving with emphasis on the etiology and treatment of organic speech disorders. The educational objectives are that students will acquire an understanding of: 1) stuttering and related fluency disorders with emphasis on causation theories and assessment techniques, and 2) other organic disorders causing speech disorders with emphasis on stroke and closed-head trauma.

Prerequisites: Enforced Prerequisite at Enrollment: CSD 300 and CSD 331

Changes Effective Fall 2022:
- Prerequisites

ENGL 202D: Effective Writing: Business Writing (3 Credits) (GWS)
Old Listing Effective Through Summer 2022:

Writing reports and other common forms of business communication. (A student may take only one course for credit from ENGL 202A, 202B, 202C, and 202D.) ENGL 202D is an advanced writing course designed to help students develop the writing strategies that they will need to write successfully on the job and to help them understand why those strategies are appropriate and effective. A key emphasis will be on rhetorical principles of effective communication, including audience analysis and defining clear, actionable purpose. Students will gain experience with a wide range of business writing genres, including reports, letters, job application documents, emails, memos and web applications like business blogs, online articles, social media profiles and personal branding. Students will also learn about the importance of document design, including how best to utilize headings, page layout, graphics and other visuals to maximize the potential for communication success.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T) and 4th Semester. Cannot repeat a course previously completed with a grade of C or higher

Changes Effective Fall 2022:
- Prerequisites

ENGL 405: Taking Shakespeare From Page to Stage (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Students experience a Shakespeare play as a text to be explicated and as a script to be performed.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)
Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 409: Composition Theory and Practice for Teachers (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

An overview of the theory and practice of writing for teachers, with emphasis on the writing process. ENGL 409 Composition Theory and Practice for Teachers (3)(BA) This course meets the Bachelor of Arts degree requirements. ENGL 409 is intended to help teachers improve their writing instruction by immersing them in composition theory and providing them with the opportunity to learn the writing process through personal experience. On completion of the course, participants will be able to: ? Articulate and test composition theory in written works ? Work through each phase of the writing process in assigned essays ? Develop strategies for writing effectively in various genres and styles, including journal writing ? Produce written works which demonstrate an awareness of audience ? Implement recommendations for effective revisions ? Provide responsive feedback to peers’ written work ? Develop a precis for a model lessonEvaluation: Students will be evaluated on their knowledge and understanding of instructional objectives, demonstrated in written assignments, class discussions and other projects.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 411M: Honors Seminar in English: Creative Writing (3-12 Credits: Maximum of 12 Credits) (H) (WF) (BA)**

Old Listing Effective Through Summer 2022:

Advanced Seminars in Creative Writing focus on a particular genre and/or topic. Genres include poetry, fiction, graphic novel, memoir, creative non-fiction, essay, or drama. Topics vary. Students work as apprentice writers, reading the work of published and expert authors, experimenting within the genre, engaging in structured peer review and group workshops, and preparing texts for publication and contest submission. Students discuss a number of issues relevant to the practice of creative writing and the production of literature, such as innovation and circulation, and numerous techniques, including the establishment of voice, creation of character plot development, pacing, and principles of prosody. Students may also consider the responsibilities of literary citizenship and the ethics of artistic representation. The courses offer an intense investigation of creative writing craft. Students develop skills in close, critical reading through the examination of exemplary works of contemporary literature and craft analysis, often reading an entire book per week. They also learn to read analytically and practically in workshop critiques of peer writing. In workshop discussion, students engage in a range of critical and editing tasks from close reading to broad conceptualization; they develop the ability to communicate ideas clearly and extemporaneously, and to negotiate meaning with others. Students experiment with and hone various writing techniques by executing focused exercises and drafting and developing pieces for final submission. They apply critical and analytical reading skills to revise and strengthen their own writing. The final project may include drafts and polished versions of two to three stories or essays, and up to a dozen poems.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 412: Advanced Fiction Writing (3-3 Credits: Maximum of 12 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Advanced study of the techniques of fiction writing; regular practice in writing the short story; group discussion of student work.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 212 and [ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)]

Changes Effective Fall 2022:

- Prerequisites

**ENGL 413: Advanced Poetry Writing (3-3: Maximum of 12 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Advanced study of the techniques of poetic composition; regular practice in writing poetry; group discussion of student work. ENGL 413 Advanced Poetry Writing (3 per semester/maximum of 6)(BA) This course meets the Bachelor of Arts degree requirements. Students enrolled in the Advanced Poetry Workshop will have successfully completed ENGL 213, Introduction to Poetry Writing. In the advanced course, they continue their study of prosody through the close reading of published poems, including entire volumes of poetry by a single author. Students will also study articles and books that discuss various elements of craft. They can expect to prepare written reading responses and formal classroom presentations on the assigned readings. They will also draft approximately one new poem or revision each week, in addition to completing various writing exercises in or outside of class. All students will prepare for and engage in the workshop critiques; participation in these conversations is essential and subject to assessment. The writing, revision, and workshop process prepare the student to compile a portfolio of 8-10 poems, which they will submit as a final project for the course.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 213 and [ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)]

Changes Effective Fall 2022:

- Prerequisites

**ENGL 416: Science Writing (3-3 Credits: Maximum of 6 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Prepares scientists and writers to gather, interpret, and present scientific information to the layman with clarity and accuracy.
Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 417: The Editorial Process (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

The process of editing from typescript through final proof.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 418: Advanced Technical Writing and Editing (3-3 Credits: Maximum of 6 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Preparing and editing professional papers for subject specialists and for others interested in careers as writers or editors.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 419: Advanced Business Writing (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Preparing and editing reports and presentations common to business, industry, and government.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 420: Writing for the Web (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Analysis and composition of informative, persuasive, and “creative” Web texts, based on rhetorical principles; no prior Web writing experience required. ENGL 420 Writing for the Web (3)(BA) This course meets the Bachelor of Arts degree requirements. This course, designed for writers and potential writers, will explore the unique opportunities and constraints of writing for the Web. As a writing course, it should appeal to students in the Humanities; however, because of the growing importance of Web texts in fields such as business and the social sciences and given the opportunity to compose/construct a variety of fictional and non-fictional “creative” and informative/persuasive Web texts, this course should be of value to students across the college. In this course, students will survey a wide variety of Web texts—webs, electronic journals and books, learning to analyze these as to their efficacy in light of each text’s rhetorical situation. As students learn to compose and construct such texts themselves, rhetorically based principles of audience awareness and persuasive appeal will be emphasized. Rather than focusing on writing html codes and java scripts, this course will build on the rhetorical principles taught in first-year writing courses, teaching students how to apply those principles to more sophisticated, multi-sensory, multi-media hyper textual writing. The course will be taught primarily in a hands-on workshop environment-in a PC computer lab or laptop-equipped classroom. Although no prior Web writing experience is required, some experience with Web navigation and computer word processing will be helpful. Students will be evaluated on the basis of their participation/attendance in the course’s workshop environment, written web analyses, and constructed web texts.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 421: Advanced Expository Writing (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Develops skill in writing expository essays, with particular attention to style. Intended for liberal arts majors.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 426: Chicana and Chicano Cultural Production: Literature, Film, Music (3-3 Credits: Maximum of 3 Credits) (US) (BA)**
Old Listing Effective Through Summer 2022:

An in-depth study of Chicana/Chicano literature, film, and music from the inception of the Chicano Movement (1965-1975) to the present. ENGL 426 Chicana and Chicano Cultural Production: Literature, Film, Music (3)(US)(BA) This course meets the Bachelor of Arts degree requirements. ENGL 426 will constitute an in-depth study of Chicano/a literature, film, and music from the inception of the Chicano movement (1965-1975) to the present. In addition to primary aesthetic texts, students will read historical, political, and theoretical essays designed to situate the Chicano/a cultural texts in historical and political context. The aim of the course is to give students a better understanding of Chicano/a cultural production by situating these works of art against other U. S. artistic traditions and within wider historical and political movements. Authors and artists under consideration in this class will vary, but will likely include Luis Valdez, Tomas Rivera, Estella Portillo Trambley, Oscar Zeta Acosta, Corky Gonzales, Gloria Anzaldua, Norma Alarcon, Cherrie Moraga, Richard Rodriguez, Dagoberto Gilb, Rolando Hinojosa, Alfredo Vea, Charlie Trujillo, Diego Vasquez Jr., Jose Rodriguez, Tomas Almaguer, Jose Esteban Munoz, Manuel Ramos, Lucha Corpi, Rudolfo Anaya, Michael Nave. This class will prepare students for advanced courses in Latin/a literatures as well as other academic courses that engage in the verbal and written analysis of complex texts. Students will be evaluated by means of essays written in and out of class, essay exams, group projects, term-long journals, and class participation. Students should expect to complete a minimum of three written assignments in the course of the term. The
An in-depth examination of important themes, writers, and/or historical developments in Jewish Literature of the United States. ENGL (J ST) 427 Topics in Jewish American Literature (3) This course will provide sustained examination of major themes, texts, and figures in the Jewish American literary tradition. The course will focus on depth rather than breadth in its analysis of the defining aspects of the literature and on what the literature reveals about Jewish American culture and identity. The United States has absorbed large numbers of Jewish immigrants from many parts of the world, holding many different ideas about Jewish practice, and affiliating themselves with many different political, social, and cultural traditions, and moreover Jews have settled and made homes in a wide variety of American communities. Close analysis of literature will therefore provide an opportunity to consider the constitution, origin, and development of Jewish America’s wider cultural, political, and social contexts. Materials will consist predominantly of primary texts, including prose fiction and nonfiction, poetry, drama, and film, and the methodology will emphasize the close reading of these texts. The course complements offerings in Jewish Studies, English, and Comparative Literature. Most obviously, the course will offer students of Jewish literature, world literature, and American literature an opportunity for contextualization. It enables students in Jewish Studies to study the rich literature of American Jews, and it adds to courses covering Jewish American history, religion, and culture. The course offers students in English and Comparative Literature a valuable, sustained introduction to an important U.S. and world sub-culture and -literature.

Changes Effective Fall 2022:

- Prerequisites

ENGL 427: Topics in Jewish American Literature (3–3 Credits: Maximum of 9 Credits)

Old Listing Effective Through Summer 2022:

Changes Effective Fall 2022:

- Prerequisites

ENGL 431: Black American Writers (3–3 Credits: Maximum of 6 Credits) (US) (BA)

Old Listing Effective Through Summer 2022:

A particular genre or historical period in the development of Black American literature. ENGL 431 / AMST 475 Black American Writers (3) (US) A study of a particular genre or historical period in the development of Black American literature. This course will allow faculty and students to focus a semester’s study on a particular genre, theme, or problem in African-American literature. The flexibility of the course will allow faculty a forum in which to share current scholarship or to relate issues in African-American literature to larger school-wide themes in a classroom environment. Because of the potential variety of topics and faculty members, specific evaluation methods will be determined by the instructor and specified in the syllabus. The course will be offered once every two years with an expected enrollment of 25 students. The course satisfies the "area" requirement in culture for American Studies majors.

Changes Effective Fall 2022:

- Prerequisites

ENGL 432: The American Novel to 1900 (3 Credits) (BA)

Old Listing Effective Through Summer 2022:

Studies in the works and the interrelationships of writers such as Emerson, Hawthorne, Poe, Thoreau, Whitman, Melville, and Dickinson. The course will cover Transcendentalism and the authors who contributed to this movement, many of whom lived in Concord, MA. Though the class will feature the works of Emerson, Hawthorne, and Thoreau, it can also branch out to address other authors such as Margaret Fuller, Jones Very, and Elizabeth Peabody. Departing from Concord, the course will explore Walt Whitman and Emily Dickinson, both of whom read and were inspired by Emerson. Finally, the course will include works by Herman Melville, who formed a friendship with Hawthorne prior to writing Moby-Dick. Though literature constitutes the center piece of this course, iterations of the course may bring in other parts of the cultural, social, and political landscape: slavery, abolitionism, Jacksonian Democracy, western settlement, art, science, and technology.

Changes Effective Fall 2022:

- Prerequisites

ENGL 433: The American Novel: 1900-1945 (3 Credits) (BA)

Old Listing Effective Through Summer 2022:

Such writers as Wharton, Dreiser, Cather, Fitzgerald, Faulkner, Hemingway, Hurston, Wright, and others.

Changes Effective Fall 2022:

- Prerequisites
Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 434: Topics in American Literature (3-3 Credits: Maximum of 99 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Focused study of a particular genre, theme, or problem in American literature. (May be repeated for credit.) ENGL 434 / AMST 472 Topics in American Literature (3) This course will allow faculty and students to focus a semester's study on a particular genre, theme, or problem in American literature. The flexibility of a topics course will allow faculty a forum in which to share current scholarship or to relate issues in American literature to larger school-wide themes in a classroom environment. Because of the potential variety of topics and faculty members, specific evaluation methods will be determined by the instructor and specified in the syllabus. The course will be offered once every two years with an expected enrollment of 25 students. The course satisfies the "area" requirement in culture for American Studies majors.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 435: The American Short Story (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Development of the short story as a recognized art form, with emphasis on major writers.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 436: American Fiction Since 1945 (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Study of novels and short fiction written in the United States since World War II, with attention to different movements, traditions, and genres.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 437: The Poet in America (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

American poets such as Bradstreet, Taylor, Poe, Emerson, Whitman, Dickinson, Frost, Eliot, Stevens, Hughes, Brooks, Moore, Williams, Plath, Rich, Lowell.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 438: American Drama (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Development from the colonial period to playwrights such as O'Neill, Wilder, Hellman, Miller, Williams, Albee, Shepard, Norman, Wilson, and others.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 439: American Nonfiction Prose (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Major prose writers such as Franklin, Emerson, Thoreau, Fuller, Henry Adams, Mailer, Baldwin, McCarthy, Dillard, Didion, Angelou, and others

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 440: Studies in Shakespeare (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Focused study of a single genre, topic, or critical approach to selected plays by Shakespeare and contemporaries.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

**ENGL 441: Chaucer (3 Credits) (IL)**

Old Listing Effective Through Summer 2022:

This course surveys the literary career of Geoffrey Chaucer, perhaps the most celebrated English-language poet of the medieval era. The course primarily examines Chaucer's own writings, with consideration of the several international authors and traditions that informed his own literary productions. Selections may vary, but students will read texts from across Chaucer's career, including from major works like Troilus and Criseyde and The Canterbury Tales. Readings from Chaucer's sources and models may include translated selections from Boethius's Consolation of Philosophy or from Guillaume de Lorris and
Jean de Meun’s Romance of the Rose, and/or examples from relevant literary genres such as romance, fabliaux, beast fable, sermon, tragedy, and exemplum. Accordingly, students will develop a knowledge and appreciation of how Chaucer shaped (and was shaped by) his continental influences and the ways in which he developed a poetic tradition in English that proved deeply influential for many centuries.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 442: Medieval English Literature (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Study of major works and genres of medieval English literature, exclusive of Chaucer.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 443: The English Renaissance (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Study of different early modern texts and traditions, with attention to poetry, drama, fiction, and nonfiction.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 444: Shakespeare (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Selected tragedies, comedies, and histories.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 445: Shakespeare’s Contemporaries (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Selected plays by Shakespeare’s major predecessors and contemporaries: Kyd, Marlowe, Jonson, Webster, Marston, Middleton, and others.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 446: Milton (3 Credits) (BA)

Old Listing Effective Through Summer 2022:

Analysis of principal poems and their background.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 447: The Restoration and the Eighteenth Century (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Study of different English writers and traditions from the neoclassical age (1660-1776), with attention to poetry, fiction, romance, and drama.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 448: The English Novel to Jane Austen (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Study of different writers and traditions in the early English novel.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 449M: Honors Seminar in English: Pre-1800s literature (3-12 Credits: Maximum of 12 Credits) (H) (WF) (BA)
Old Listing Effective Through Summer 2022:

This course offers honors students the opportunity to explore in depth a period of early English literature before 1800. Topics will vary from year to year, but may include Beowulf and Anglo-Saxon literature and culture, late medieval authors such as Chaucer, Gower, and Langland, sixteenth-century lyric poets, Shakespeare, Shakespeare and film, Elizabethan dramatists, authorship and book history, early women authors, seventeenth-century writers such as Donne, Herrick, Wroth, and Bacon, writers of the English Revolution, Milton, and eighteenth-century writers such as Pope, Dryden, and Swift. Assignments will include extensive primary and secondary reading, participation in class discussion, and a substantial paper or final project. Departmental approval required (for more special information please refer to the notes section in LionPATH).
Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

**Changes Effective Fall 2022:**

- Abbreviated Title
- Prerequisites

**ENGL 450: The Romantics (3 Credits) (IL) (BA)**
Old Listing Effective Through Summer 2022:

Writers of the British Romantic period (roughly 1790 to 1832) often made sweeping claims for the power of poetry and imagination. Percy Bysshe Shelley contended that "poets are the unacknowledged legislators of the world," while John Keats declared that "beauty is truth, truth beauty." Against the background of political revolution in France, the rise of industrialization and empire, and increasing social instability, Romantic writers turned to nature as a source of the self and looked back to childhood as a site of both innocence and ambivalence. Others turned their efforts to the supernatural and the gothic, hoping to inspire what Samuel Taylor Coleridge called "that willing suspension of disbelief for the moment which constitutes poetic faith." This course is designed to provide an introduction to the richness and diversity of Romantic-era literature. It is not intended to be an exhaustive overview of the entire period, but rather an introduction to the best known Romantic ideas, many of which still influence the way we think about art and literature in the present day as well as an invitation to further study and engagement. In that spirit, we will not work from a predetermined definition of "romanticism," but instead will build a collective, working understanding of the concept.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

**Changes Effective Fall 2022:**

- Prerequisites

**ENGL 451: Literary Modernism in English (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Survey of literary modernism in English and English translation in a variety of genres, including poetry, fiction, and drama.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

**Changes Effective Fall 2022:**

- Prerequisites

**ENGL 452: The Victorians (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Poets such as Tennyson, Browning, Arnold, and Hopkins; also prose by writers such as Carlyle, Mill, Ruskin, and Arnold.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

**Changes Effective Fall 2022:**

- Prerequisites

**ENGL 453: Victorian Novel (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Study of texts and traditions in the nineteenth-century English novel.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ESL 15 or ESL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

**Changes Effective Fall 2022:**

- Prerequisites

**ENGL 454: Modern British and Irish Drama (3 Credits) (BA)**
Old Listing Effective Through Summer 2022:

From Wilde and Shaw to the present season. ENGL 454 Modern British and Irish Drama (3)(BA) This course meets the Bachelor of Arts degree requirements. ENGL 454 will introduce students to some of the most exciting playwrights and important trends in modern British and Irish drama from the late nineteenth century to the present. The course will examine a number of plays, exploring not only how they work formally, but also how changing cultural and historical contexts helped to shape the plays and British and Irish drama more generally. Authors under consideration will vary from class to class, but may include writers such as Oscar Wilde, George Bernard Shaw, John Syne, Lady Gregory, William Butler Yeats, Sean O’Casey, Samuel Beckett, Denis Johnston, Brendan Behan, Brian Friel, Tom Murphy, Martin McDonagh, Noel Coward, John Osborne, T. S. Eliot, Robert Bolt, Harold Pinter, Caryl Churchill, and Tom Stoppard. The course will explore such topics as the role of drama in the Irish Revival, nationalism, and the revolution, the use of myth and folklore in drama, the emergence of realism, the function of Wilde and Shaw’s humor in their plays, drama’s response to the decline of the British empire, the modernist verse drama, post-modernism in drama, issues of stagecraft and performance, and the political function of such theaters as the Abbey Theatre or the Field Day Company. Students will write at least two papers on particular plays, and can expect to take a mid-term exam and a final exam. The course may be used as English Major elective credit or as credit towards the English minor, and will be offered once a year with 40 seats per offering.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ESL 15 or ESL 15S or ESL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

**Changes Effective Fall 2022:**

- Prerequisites

**ENGL 455: Topics in British Literature (3-3 Credits: Maximum of 99 Credits) (BA)**
Old Listing Effective Through Summer 2022:

Focused study of a particular genre, theme, or problem in British literature. (May be repeated for credit.) ENGL 455 Topics in British Literature (3)(BA) This course meets the Bachelor of Arts degree requirements. This course will allow faculty and students to focus a semester’s study on a particular genre, theme, or problem in British literature. The flexibility of a topics course will allow faculty a forum in which to share current scholarship or to relate issues in British literature to larger School-wide themes in a classroom environment. Offering such focused studies under a British literature umbrella will allow majors to apply these offerings to their upperlevel British literature requirement.
Because of the potential variety of topics and faculty members, specific evaluation methods will be determined by the instructor and specified in the syllabus. This course will be offered once every two years, with an expected enrollment of 20-25 students.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

**ENGL 456: British Fiction, 1900-1945 (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Study of writers and traditions in British short fiction and novels, 1900-1945.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

**ENGL 457: British Fiction Since 1945 (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Readings in British fiction since World War II.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

**ENGL 458: Twentieth-Century Poetry (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

Study of poetry written in English during the twentieth and twenty-first centuries, with attention to different writers, forms, and traditions.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

**ENGL 460: Business and Literature (3-3 Credits: Maximum of 3 Credits)**

Old Listing Effective Through Summer 2022:

An investigation into how writers and the cultures in which they write have represented business and those engaged in it. For many people, literature and business could not have less to do with each other. According to this view, literature escapes from reality to the imaginative, while nothing could be more focused on the real than business and its buying and selling of commodities and services. The problem is that no one told literary writers of this mutual incompatibility. For centuries, writers have peered into the world of business and brought back stories intended to document, inspire, and warn. True, writers have often, and sometimes unthinkingly, condemned business and those who follow it, but they have just as often had genuine insights into its workings. In this course, we will follow the relationship between literature and business over the course of modern history. Although one version of the course would begin with literature that dates back to the invention of capitalism in (more or less) the sixteenth century, our course will begin at the turn of the nineteenth century with the Industrial Revolution in England and the United States and follow the literature of business up to the present. Our aim in reading is not just to understand how writers have represented business and those who pursue it, which, it has to be admitted, has often been with contempt. But, rather, in reading more sympathetic works, to understand the drama of business, why those who pursue it find it so invigorating.

Money, of course, is one answer to that question, but it is neither the only nor the most important one. Texts may vary, but they are almost certain to include Charles Dickens's Dombey and Son (1847); Herman Melville's "Bartleby the Scrivener" (1853); the "Economy" chapter of Henry David Thoreau's Walden (1854); Anthony Trollope's The Way We Live Now (1875); Thorstein Veblen's Theory of the Leisure Class (1899); George Bernard Shaw's Major Barbara (1905); Theodore Dreiser's The Financier (1912); Sinclair Lewis's Babbitt (1922); Edwin Lefèvre's Reminiscences of a Stock Operator (1922); James M. Cain's hardboiled masterpiece Mildred Pierce (1941); F. Scott Fitzgerald's unfinished novel The Love of the Last Tycoon (1941); Arthur Miller's Death of a Salesman (1949); Sloan Wilson's The Man in the Gray Flannel Suit (1955); Ayn Rand's Atlas Shrugged (1957); Ken Kesey's Sometimes a Great Notion (1962); Joseph Heller's Something Happened (1974); William Gaddis's J R (1975); David Mamet's Glengarry Glen Ross (1984); Michael Lewis's Liars Poker (1987); and Richard Powers' Gain (1998).

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

**ENGL 461: The Vernacular Roots of African American Literature (3 Credits) (BA)**

Old Listing Effective Through Summer 2022:

The relationship between oral tradition and literary texts and the double consciousness of African American voice in "print."

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 015 or ENGL 030

Changes Effective Fall 2022:

• Prerequisites

**ENGL 462: Reading Black, Reading Feminist (3 Credits) (US) (BA)**

Old Listing Effective Through Summer 2022:

This course examines intersectional identity and its representations of gender, class, race, sexuality, and cultural difference in texts by black American women. The course also identifies analyzes major issues concerning the discovery and development of a black feminist tradition and the ways in which that tradition has engaged issues of racism, sexism, class exploitation, and/or heteronormativity.
Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Cross-Listed Courses: WMNST 462

Changes Effective Fall 2022:

• Prerequisites

ENGL 464M: Honors Seminar in English: Multicultural (3-12 Credits: Maximum of 12 Credits) (H) (WF) (BA)
Old Listing Effective Through Summer 2022:

This advanced Honors Seminar in multicultural literature, rhetoric, and cultural studies allows students to explore and research a topic related to race, gender, ethnicity, sexuality, queer theory, post-colonialism, disability, minority literature, women's literature, world rhetorics, or other literatures reflecting the diversity of cultures and perspectives important to the English major. Topics will vary depending on the course instructor. Recent topics have included disability and literature, post-racial America, revolutionary writing, cognitive disability in literature, and early modern women authors. Department approval required (for more special information please refer to the notes section in LionPATH).

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Abbreviated Title
• Prerequisites

ENGL 470: Rhetorical Theory and Practice (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Application of certain rhetorical principles to problems in composition. Writing exercise. Designed as preparation for the teaching of composition.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

ENGL 471: Rhetorical Traditions (3-3 Credits: Maximum of 6 Credits) (IL) (BA)
Old Listing Effective Through Summer 2022:

(Course content may vary by instructor). This class will introduce you to communication theories developed in classical Greece and China. Economic globalization and the increased world travel have brought Americans into direct contact with East Asian peoples and their cultures. At the same time, individuals with an East Asian linguistic and cultural background are making a strong presence in the United States. The urgency to understand East Asian peoples-their cultures, their languages, and their ways of reasoning-is being felt by a majority of Americans. This class will focus on the rhetorical traditions that have grown out of classical Greece and China. We will not only read ancient and modern texts but also watch movies produced in China and the United States to understand their philosophies, literatures, and communication arts. All readings are in English.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

ENGL 472: Current Theories of Writing and Reading (3-3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Summer 2022:

Investigates models of textual production and reception current within English studies. (Section subtitles may appear in the Schedule of Courses.)

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

ENGL 473: Rhetorical Approaches to Discourse (3-3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Summer 2022:

Practices the criticism of written texts from selected rhetorical perspectives. (Section subtitles may appear in the Schedule of Courses.)

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

ENGL 474: Issues in Rhetoric and Composition (3-3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Summer 2022:

Examines selected topics in the field of rhetoric and composition. (Section subtitles may appear in the Schedule of Courses.)

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

ENGL 475: Comics Studies (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

This course introduces students to the academic field of Comics Studies, that is, the scholarship of comics and graphic novels. The course surveys different methodologies and focuses of comics scholarship, with historical representation of different theorists and critics. In addition to reading widely in comics scholarship, students will also read several comics and graphic novels, for which they will produce their own
analyses and criticism. Overall, the course provides a foundation in Comic Studies, with broad reading across primary and secondary texts.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

ENGL 477: Teaching Children's Literature (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Teaching Children's Literature in light of recent literary pedagogy, the history of childhood, and critical approaches to Children's Literature. ENGL 477 Teaching Children's Literature (3) This course explores the teaching of Children's Literature. Beginning with students' own interpretations of the children's books we read, we develop critical concepts through which to understand and teach children's literature. The course presumes that books written for children have an intrinsic importance as literary and cultural artifacts and so demand serious consideration. Because this course is offered as an English course, we will concentrate on such things as the formal characteristics of the works we study, the kinds of audiences they seem to solicit, their implied authors, their ideologies, and so forth. The emphasis of the course is on teaching Children's Literature as literature; the course assumes that teaching literature is teaching reading and writing. Students are evaluated according to their participation in class discussion and three required papers one on the teaching of a particular work of Children's Literature, one on some aspect of the history of childhood, and one that analyzes a children's book.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

• Prerequisites

ENGL 480: Communication Design for Writers (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

This course explores visual design, non-verbal communication, and software packages used in professional settings to most effectively present written communications. ENGL 480 Communication Design for Writers (3) This course is designed to familiarize students with an integrated theory of the roles that visual, verbal, and non-verbal communication play in the production of professional documents using the technologies and software applications most widely used in many organizational settings. To this end, the course will focus on employing non-verbal design elements (color, photographs, graphics, page layout, typography, paper) to develop effective communications tailored to a variety of media, audiences, and purposes using software packages such as Quark XPress, Photoshop, Illustrator, InDesign, Excel. Emphasis will be placed on producing clear, insightful, polished, professional documents, both individually and as part of a team. As part of the course, students can expect to a.) Understand the theories, elements, and principles of visual and non-verbal communication. b.) Appreciate the roles of the audience, purpose, and context in planning and composing documents. c.) Value the role of ethos, pathos, and logos when planning and composing documents. d.) Learn basic skills in a variety of software packages most widely used in the professional world. e.) Design and compose a variety of documents for a variety of audiences that display their writing and design skills. f.) Demonstrate through their documents an understanding of the theories of visual, verbal, and non-verbal communication. g.) Assess their own strengths and weaknesses as writers and designers. h.) Demonstrate the ability to reflect critically on their own and others' discourse practices. i.) Gain an understanding of the role and scope of other professionals and other disciplines in creating professional communications

Prerequisites: Enforced Prerequisite at Enrollment: [ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)] and (ENGL 202A or ENGL 202B or ENGL 202C or ENGL 202D)

Changes Effective Fall 2022:

• Prerequisites

ENGL 481: Literary Theory: Historical Perspectives (3 Credits) (BA)
Old Listing Effective Through Summer 2022:

Prerequisites: Enforced Prerequisite at Enrollment: [ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)] and (ENGL 202A or ENGL 202B or ENGL 202C or ENGL 202D)

Changes Effective Fall 2022:

• Prerequisites
Selected topics in the history of literary criticism and theory within the English-language tradition.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 482: Contemporary Literary Theory and Practice (3-3 Credits: Maximum of 6 Credits) (BA)
Old Listing Effective Through Summer 2022:
Contemporary literary theories and their implication for critical practice as applied to British, American, and other English-language literary works.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 482W: Contemporary Literary and Cultural Theory (3 Credits) (WF) (BA)
Old Listing Effective Through Summer 2022:
Contemporary literary and cultural theories and their implication for critical practice as applied to a variety of texts, e.g. literary, linguistic, visual, multimedia, and/or popular.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 483: Problems in Critical Theory and Practice (3 Credits) (BA)
Old Listing Effective Through Summer 2022:
Intensive study of one or more recent theoretical approaches as applied to British, American, and other English-language literary works.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 484: James Joyce (3 Credits)
Old Listing Effective Through Summer 2022:
Analysis of principal works and their background.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 485: Australian and New Zealand Literature and Culture (3 Credits) (BA)
Old Listing Effective Through Summer 2022:
Questions of nationality, identity, gender, race, class, colonialism, and postcolonialism in these literatures.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 486: The World Novel in English (3 Credits) (IL) (BA)
Old Listing Effective Through Summer 2022:
Studies in the novel, written in English, by writers outside of the United States and Great Britain. ENGL 486 The World Novel in English (3) (IL) This course examines the nature of the novel as written in English by writers outside of the United States and Great Britain. Such a study necessarily involves both an aesthetic and a political perspective, in that the tradition of the novel in these landscapes so often involves the aesthetic and political suppression of native literary forms and voices. Thus, this course looks at the novel as written both by the colonizer and by the colonized. It considers the politics of the aboriginal author writing in an adopted language, and the ways in which such an adoption bears upon related ethnic and gender matters; it also considers the sorts of artistic and political tensions that emerge in the work of writers who write in what might be called the dominant English tradition. This course also studies the work of what might be called the multi-cultural writer, or the writer perforce extracted from a native, non English-speaking culture and placed within a larger, colonial, English-speaking culture. Matters of novelistic form, as they are related to ethnic and cultural identity, are also discussed. One intent of the course is to reveal the cultural, racial, and gender diversity that naturally adheres to these particular literary traditions.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Changes Effective Fall 2022:

- Prerequisites

ENGL 488: Modern Continental Drama (3 Credits) (IL) (BA)
Old Listing Effective Through Summer 2022:
Study of major traditions and writers in European drama of the early to mid twentieth century.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Cross-Listed Courses: CMLIT 488

Changes Effective Fall 2022:

- Prerequisites
ENGL 490: Women Writers and Their Worlds (3 Credits) (US) (IL) (BA)

American and British literature written from the perspective of women. ENGL (WMNST) 490 Women Writers and Their Worlds (3) (US;IL)(BA)

This course meets the Bachelor of Arts degree requirements. ENGL/WMNST 490 covers particular aspects of American and British literature written from the perspective of women. The courses stress the diversity of women's authorial worlds, both through time and/or space. The readings and specific focus vary from semester to semester. ENGL/WMNST 490 seeks to make students aware of the extensive body of literature written by women, but, unlike ENGL 194, which is a survey course of women's literature, ENGL/WMNST 490 can be a more intensive course, focusing on selected themes and topics of particular concern to women as reflected in the poetry and fiction of twentieth-century American and British women writers. The class can also be taught in relationship to earlier periods, dealing, for instance, with English women novelists from 1775-1865. In such a class, readings would include fiction by Fanny Burney, Mary Wollstonecraft, Ann Radcliffe, Jane Austen, Mary Shelly, Emily Bronte, Elizabeth Gaskell, and George Eliot. The course would then place each novel in its historical, social, intellectual, and literary context, and explore the various ways in which some of England's best writers transformed their female experience of the world into fiction that extended the range and influenced the development of the novel. Regardless of the particular focus, all sections of the course pose the following questions throughout: Do women use the same myths, archetypes, and literary conventions as male writers? Or do they sometimes have to modify the myths, archetypes, and literary conventions originated by their male precursors in order to adapt them to female experience? Is there such a thing as a distinctively female imagination, with a symbolic language of its own? Is there such a thing as a chain of literary influence linking women writers to each other? What are the strategies for coping with the anxieties of authorship? What is the interaction between gender and genre? In what ways are creativity and procreativity modes of defying prevailing ideologies? Does a woman's psychological development have an effect on the plots a woman novelist conceives? How does women's literature reflect the realities of women's lives? As a course in women's literature, ENGL/WMNST 490 concerns itself with questions of gender. In so far as some of these women writers are black or women of color, it concerns itself with questions of race and ethnicity. In as far as the course looks at women's literature in the context of men's literature, it is concerned with the inter-relationship between dominant (male) and non-dominant (female) culture in the United States as well as in Britain. In so far as the course covers lesbian writers, it is concerned with sexual orientation. Students should expect to complete a minimum of three written assignments in the course, two course papers, and an essay final exam in class. The papers each will ask students to choose a text to analyze in relationship to one of the thematic modules the course has chosen, for instance, to discuss how Virginia Woolf's Mrs. Dalloway analyzes the position of upper-middle class women in a particular moment in history when women had achieved the vote, but were still largely constrained by patriarchal social norms. In addition to written assignments, students will be evaluated on class discussion and general participation. The course not only prepares students for taking up literary and cultural analysis in English classes, but also in any other class that engages in the verbal and written analysis of complex written texts, and in other classes in Women's Studies or in other Penn State departments that address the social, cultural, or ethical issues of gender. The course may be used as English Major elective credit or as credit towards the English Minor; it may also be used in the Women's Studies major and minor. It will be offered once a year with 40 seats per offering.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Cross-Listed Courses: WMNST 490

Changes Effective Fall 2022:

• Prerequisites

ENGL 491: The Capstone Course in Professional Writing (3 Credits) (BA)

Old Listing Effective Through Summer 2022:

This culminating course for Professional Writing majors concentrates on reflective analyses, design, and presentation of documents in the development of professional portfolios.

Prerequisites: Enforced Prerequisite at Enrollment: [ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)] and (ENGL 202A or ENGL 202B or ENGL 202C or ENGL 202D) and 7th Semester standing or higher AND enrollment in the PWRIT_BA major.

Changes Effective Fall 2022:

• Prerequisites

ENGL 492: American Women Writers (3 Credits) (BA)

Old Listing Effective Through Summer 2022:

A study of selected American women writers. ENGL 492 / AMST 476 / WMNST 491 American Women Writers (3) A study of selected women writers, this course provides the opportunity to study writing by American women from an historical perspective and to explore the views these women have of themselves as artists. The course will concentrate on a careful reading of works by a variety of authors. It will raise the question of the role that gender—as well as other differences such as race, class, and ethnicity—play in the selection of literary forms and the development of character, theme, symbol, and rhetorical strategy. It will also explore the dimensions American women have brought to the American literary tradition. The course satisfies the area requirement in culture for American Studies majors and is open to all majors meeting the prerequisite requirements. The course will be offered once every two years and enrollment is 25.

Prerequisites: Enforced Prerequisite at Enrollment: ENGL 15 or ENGL 15A or ENGL 15S or ENGL 15E or ESL 15 or ENGL 30H or ENGL 30T or (ENGL 137H and ENGL 138T)

Cross-Listed Courses: AMST 476 WMNST 491

Changes Effective Fall 2022:

• Prerequisites

ENT 313: Introduction to Entomology (2-2 Credits: Maximum of 2 Credits)

Old Listing Effective Through Summer 2022:

This course is an introduction to entomology addressing issues of insect diversity, morphology and physiology, and identification of the most common groups of adult and immature insects. This course will highlight
the beneficial and detrimental roles insects in human society along with responsible methods of pest management. Other topics such as insects as vectors of disease and the ecological and agricultural impact of exotic insect species introduction and climate change will be discussed.

Prerequisites: AGECO 144; AGECO 121; ANSC 10; ANSC 300; ANTH 21; ANTH 216N; ANTH 218; ANTH 260; ANTH 271; 3 credits of BIOL; BISC 1; BISC 2; BISC 3; 3 credits of CHEM; ENT 202; ENT 216N; ENT 222; ERN 210; FOR 201; FRNSC 100; HORT 101; HORT 150N

Changes Effective Fall 2022:

• Prerequisites

HM 435: Financial Management in Hospitality Operations (3 Credits)

Old Listing Effective Through Summer 2022:

HM 435 is an introductory financial management course for the hospitality management major. The course will teach students fundamental knowledge of financial management concepts. This course will introduce a wide range of essential concepts that students can utilize to improve their decision-making and value creation abilities. The course introduces financial management concepts with a focus on practical application, both in professional and personal lives. Students’ ability to learn these concepts will be tested through group and individual assignments. This course focuses on conceptual and analytical knowledge and skills. Practical knowledge will also be reinforced through in-class discussions, and periodic readings that focus on current issues in finance and hospitality.

Prerequisites: Enforced Prerequisite at Enrollment: ECON 102 and a grade of C or better in HM 336

Changes Effective Fall 2022:

• Title
• Abbreviated Title
• Description
• Prerequisites

IE 428: Metal Casting (3 Credits)

Old Listing Effective Through Summer 2022:

Application of engineering principles to the design of castings; casting of ferrous and nonferrous alloys; laboratory and simulation projects.

Prerequisite: IE 311, IE 312, or METAL 408W

Changes Effective Fall 2022:

• Description
• Prerequisites

KINES 495B: Field and/or Research Practicum in Kinesiology (6 Credits)

Old Listing Effective Through Summer 2022:

This course places students in the workplaces or research settings with the expectation that these experiences will allow them the opportunity to apply and integrate content from all their courses in the program. They will be placed at a variety of sites, including but not limited to research laboratories, professional fitness centers, rehabilitation facilities, senior centers, community health and wellness programs, and hospitals. They will learn the day-to-day requirements of being “on the job” or “in the lab,” including professional management practices and ethical considerations. Practicum work will be evaluated on an ongoing basis with the student intern, work place supervisor, and faculty member involved in the process. The course will take place off campus as work sites and no special on-campus facilities are required. It will be offered annually as the last course in the major.

Prerequisite: Enforced Prerequisite at Enrollment: KINES 395B and KINES 395 and seventh-semester standing and 9 credits of 400-level KINES courses and 2.00 cumulative GPA

Changes Effective Fall 2022:

• Abbreviated Title
• Description
• Prerequisites

LARCH 116: Design II: Spatial Design (3 Credits)

Old Listing Effective Through Summer 2022:

Landscape Architecture Studio 2 – the second design studio in the undergraduate Landscape Architecture curriculum – introduces students to small-scale site design. Students are introduced to essential topics in site design: the importance of understanding and responding to site and program, the fundamentals of pedestrian and vehicular circulation, the necessity of designing within a broader social and natural landscape context, and creating refinement in design form. Students are introduced to fundamental concepts through lectures and readings then presented with design projects intended to provide immediate application of those concepts. At the end of each design project, students develop presentation graphics that explain their final designs and supporting information.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 115 and LARCH 155 Enforced Concurrent at Enrollment: LARCH 156

Changes Effective Fall 2022:

• Prerequisite/Concurrent

LARCH 156: Skills Lab II: Hand & Digital Graphics (2 Credits)

Old Listing Effective Through Summer 2022:

Landscape Architecture Skills Lab 2 is the skills lab that runs concurrently with the second design studio in the undergraduate Landscape Architecture curriculum. This skills lab will develop students at the intermediate level of visual communication in landscape architecture with a primary focus on 2D and 3D raster and vector drawing. Spatial design composition is developed through experiencing a variety of approaches to visual communication. Students explore design ideas through sketching in plan, section and perspective and by modeling their ideas in three dimensions.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 155 and LARCH 115 Enforced Concurrent at Enrollment: LARCH 116

Changes Effective Fall 2022:

• Prerequisite/Concurrent
In order to perform landform manipulation, students must have a suite of computer tools. Course objectives: a) To assist students in initial efforts in acquiring and processing site data; b) To perform calculations such as cut and fill, spot elevations, and slope calculations; c) To visualize and complete basic manipulation of landforms; d) To understand the interaction of physical site features on individual sites (e.g., soil and topography); and e) To communicate their final site designs according to professional standards.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 116 and LARCH 156 Enforced Concurrent at Enrollment: LARCH 255

Changes Effective Fall 2022:

• Prerequisites/Concurrent

LARCH 216: Design IV: Expanded Use, Scale, and Context (4 Credits)

Old Listing Effective Through Summer 2022:

Landscape Architecture Studio 4 – the fourth studio in the undergraduate Landscape Architecture curriculum – follows LARCH 215 and introduces students to the broader perspective of landscapes as expressions of cultural and natural processes. Theories, methods, and tools for effectively studying and analyzing larger scale landscapes will be explored through readings and studio assignments. Students will be presented with landscapes in different geographic contexts and develop skills in conducting landscape research and analysis and using appropriate tools and techniques for effectively exploring alternative land use scenarios. In support of the expanded complexity of working at a larger scale, students are expected to draw upon their knowledge of ecology and ecosystems from previous coursework (LArch 145 and 245). Students will also draw upon precedent studies they may have conducted in landscape architecture history (LArch 060) and previous design studio courses. Students enrolled in LArch 216 will be concurrently enrolled in the associated design course (LArch 256) that will develop their knowledge and skills with the tools of landscape planning, specifically geographic information systems (GIS). In addition, students will continue to develop skills in graphic representation and written and oral communication as a means to disseminate their planning and design proposals for review and discussion.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 145 and LARCH 215 and LARCH 255. Enforced Concurrent at Enrollment: LARCH 256

Changes Effective Fall 2022:

• Prerequisites/Concurrent

LARCH 235: Design Implementation I: Grading (3 Credits)

Old Listing Effective Through Summer 2022:

Introduction of basic principles and tools supporting landform data, site systems, grading, visualization representation and site circulation. LARCH 235 Design Implementation I: Grading (2) As an introductory design implementation course, this course provides the foundation for site design in landscape architecture. At the core of the course are four general bodies of knowledge: Geometrics, Landform Manipulation, Site Systems, and Computer Applications for Site Analysis and Design. Geometrics: In order to perform landform manipulation, students must be able to efficiently acquire and process basic physical information about a site and are required to understand a suite of measurements. This course will first provide an overview of the digital and paper data sources available to landscape architects. Students will develop basic skills in manipulating or processing these data in order to comply with the requirements of site design. The course will also provide the basic measurements and formulae required for students to efficiently and accurately manipulate landforms. Landform Manipulation: One of the most critical skills landscape architects must acquire as designers is the ability to design landforms to accommodate changes in use and to translate their design ideas into dimensionally precise topographic representations of their designs. This course provides the basic knowledge for students to complete this process. Beginning with a single site element, students are expected to explore the suite of opportunities to place and modify a site to fit a single site element. Increased complexity is added to the suite throughout the remaining portions of the semester, thus enabling students to balance the opportunities and constraints presented by each individual design element and the overall site design. Site Systems: Building on ecological components of the curriculum, this course provides the first specific and physical understanding of basic site systems critical to every landscape architect's design. Students will primarily focus on the major site features as related to site drainage, such as soil, topography, and surface geology, but will also be expected to recognize regional context in their designs. Computer Applications for Site Analysis and Design: A central component underlying the instruction of the course is providing students with a suite of computer tools. Course objectives: a) To assist in initial efforts in acquiring and processing site data; b) To perform calculations such as cut and fill, spot elevations, and slope calculations; c) To visualize and complete basic manipulation of landforms; d) To understand the interaction of physical site features on individual sites (e.g., soil and topography); and e) To communicate their final site designs according to professional standards.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 116 and LARCH 156 Enforced Concurrent at Enrollment: LARCH 215 and LARCH 255

Changes Effective Fall 2022:

• Prerequisites/Concurrent

LARCH 236: Design Implementation II: Materials (3 Credits)

Old Listing Effective Through Summer 2022:

The landscape architect calls upon a rich array of materials to construct the built elements of landscape: walls, ground surfaces, overhead structures and furniture systems. The functional success and durability of many historical and traditional construction methods is based on a learned appreciation of the qualities and behaviors of materials in use in the landscape. Students develop understanding of the fundamental structural qualities of materials and use that knowledge to devise and illustrate their own design details. The same understanding of material behaviors will be used to investigate the qualities of novel construction materials, and will guide the development of construction details that respond to new constraints and opportunities. The main focus of 236 will be on materials and construction detailing, with emphasis on techniques appropriate for an array of design situations. Representation of design ideas using computer-aided-drafting is expected in this class.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 235 and LARCH 336
Changes Effective Fall 2022:

- Prerequisites

**LARCH 245: Ecology & Plants II (3 Credits)**

Old Listing Effective Through Summer 2022:

This course applies knowledge gained in LARCH 145 by emphasizing planning and design based upon a systems approach to plants, soil and water. The course consists of lectures, campus walks, guest lectures and one day-long field trip to a public garden. The lectures and campus walks focus upon the identification of native plants in the landscape. Guest lectures cover additional, related topics. Students learn about specific native plants and plant communities as the basis for ecological planting design in reference to the ways these plants adapt to local climate, soil and hydrologic regimes. The use of native plant communities in planting design as practiced in this course also promotes the conservation and restoration of biodiversity and the promotion of human wellbeing. It can minimize the use of fertilizer, irrigation, and costly maintenance regimes. Students are also introduced to landscapes that have been shaped by the interactions between people and their environment. The use of native plant communities can be part of the preservation and re-creation important vernacular and historic cultural landscapes. Native plant communities express the identity and beauty of place. A primary goal of the course is to develop students’ understanding of the values and uses of native plant communities toward achieving sustainable solutions to the problems of environmental degradation, resource scarcity and global climate change. Course assignments are linked directly to this goal by providing students with experience in designing landscapes where natural processes can function effectively.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 145

Changes Effective Fall 2022:

- Prerequisites

**LARCH 246: Ridge & Valley in the Field (1 Credit)**

Old Listing Effective Through Summer 2022:

LARCH 242 Ridge & Valley Field Study explores the intrinsic links between landform, geophysical and biological processes, vegetation communities, and human manipulation of the landscape through time. It comprises a series of four one-day trips to select locations across our local Ridge & Valley landform region (Appalachian Mountain section), providing the opportunity to examine phenomena at the site level, particularly plants, soils, and landscape contexts. The field experience is immediately preceded by a few skills-building preparatory activities (e.g. workshop(s), test) to establish basic competencies and fore-knowledge. An essential tenet of the course is that layered and interconnected landscape systems learning is something all landscape architects should pursue in their region of practice. Every place possesses a particular relationship between the underlying geology, climate, hydrology, landform, soils, and the plants and animals that inhabit it. Understanding this relationship and learning how to analyze and interpret landscapes is important to all spatial design work as a source of essential information and as a source of design inspiration. The Ridge & Valley region contains an especially clear, distinct and "readable" relationship between the geophysical and the biological-between the geological underpinnings and the plants and animals that inhabit the surface. This makes the Ridge & Valley an outstanding context to learn how to observe these important, sometimes subtle, relationships. Once students understand what to look for and how to observe a landscape, they can apply this method to any landscape in the world. The conditions change from place to place, but the method is transferable.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 145

Changes Effective Fall 2022:

- Prerequisites

**LARCH 255: Skills Lab III: Digital Graphics (2 Credits)**

Old Listing Effective Through Summer 2022:

Landscape Architecture Skills Lab 3 is the skills lab that runs concurrently with the third design studio in the undergraduate Landscape Architecture curriculum. This skills lab will develop students at the advanced level of visual communication in landscape architecture with a primary focus on 2D and 3D raster and vector drawing. Spatial design composition is developed through experiencing a variety of approaches to visual communication. Students explore design ideas through sketching in plan, section and perspective and by modeling their ideas in three dimensions.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 116 and LARCH 156 Enforced Concurrent at Enrollment: LARCH 215

Changes Effective Fall 2022:

- Prerequisites
- Concurrent

**LARCH 256: Skills Lab IV: GIS (2 Credits)**

Old Listing Effective Through Summer 2022:

Landscape Architecture Skills Lab 4 is the skills lab that runs concurrently with the fourth design studio in the undergraduate Landscape Architecture curriculum. This skills lab will introduce geographic information system (GIS) as a primary tool in regional analysis and planning. The students will learn to integrate GIS into a broadly-based approach to managing data, developing concepts, and communicating ideas.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 215 and LARCH 255 Enforced concurrent at Enrollment: LARCH 216

Changes Effective Fall 2022:

- Prerequisites
- Concurrent

**LARCH 276: Human Dimensions of Design: History & Theory (3 Credits)**

Old Listing Effective Through Summer 2022:

The human dimensions of placemaking must consider the types of places people populate. New to civilization, the 21st century has been characterized as the urban century. More people live in urban areas than in rural areas, and this trend is expected to continue especially in Asia and Africa. This course will primarily focus on examining social and cultural issues in landscape architecture and planning. The course will explore rural, urban, and extra-urban sites, the inclusivity and exclusivity of American spaces, and issues of gender and diversity of landscapes. The course will balance lectures, readings, and student presentations. Students will be introduced to methods to identify socio-cultural issues in landscape design, planning, and placemaking.
Prerequisites: Enforced Prerequisite at Enrollment: LARCH 60

Changes Effective Fall 2022:

• Prerequisites

LARCH 315: Design V: Expanded Use, Scale, and Context (4 Credits)
Old Listing Effective Through Summer 2022:

Landscape Architecture Design Studio V – the fifth design studio in the undergraduate Landscape Architecture curriculum – follows LARCH 216 and introduces community and spatial design that accommodates civic and public functions while addressing social and environmental imperatives. It also expands on site design and program that creatively reconciles community-based (i.e. residential and/or public space) agendas. In support of focused explorations of community-oriented design, students are expected to draw on their knowledge of regional and landscape systems from LARCH 216, as well as site design in LARCH 215. In designing public spaces that lie at the heart of thriving communities, students are also expected to draw on technical skills in grading, materials, and planting acquired the implementation sequence. Throughout the semester, students will continue to develop skills in graphic representation and visualization to explore design ideas and develop presentation graphics. Students are expected to draw upon visualization skills developed through the skills lab sequence.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 216 and LARCH 256

Changes Effective Fall 2022:

• Prerequisites

LARCH 335: Design Implementation III: Planting Methods (3 Credits)
Old Listing Effective Through Summer 2022:

The third of four courses in the landscape architecture implementation sequence, this course addresses the applied principles, tools and techniques of planting design implementation, with a focus on landscape planting methods and technically proficient documentation. It relies on students having achieved foundational planting design knowledge and abilities in prior design studios and prerequisite courses. Proceeding briskly through site and contextual analysis and conceptual design, we will concentrate on methodical design development, investigation of planting implementation and management methods, and preparation of planting contract documentation. Upon completion of the course, students will have achieved proficiency in planting design implementation as integral to the overall design process and vital to realizing goals for landscape performance, aesthetics, site functionality, and broader social and environmental values.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 216 and LARCH 235 and LARCH 256

Changes Effective Fall 2022:

• Prerequisites

LARCH 336: Design Implementation IV: Stormwater (3 Credits)
Old Listing Effective Through Summer 2022:

This course is the fourth of four studio courses in the implementation sequence, all of which focus upon the more technical aspects of landscape architectural practice. By means of lectures, studio problems, assigned readings, and computer courseware, LArch 336 will present the principles and techniques of: Advanced Landform Design and Site Grading—integration of landform and structure through iterative grading design process; water flow and surface drainage. Site Systems and Stewardship—soil, water, and vegetation interactions and ecology; site protection; site systems management; environmental responsibilities and stewardship. Hydrology and Stormwater Management—basic site hydrology; overview of hydrology and stormwater management concepts, infiltration; surface runoff calculations, surface and subsurface drainage systems design. Production of technical drawings using computer-aided-drafting is expected in this class.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 235

Changes Effective Fall 2022:

• Prerequisites

LARCH 386: Professional Practice (3 Credits)
Old Listing Effective Through Summer 2022:

An investigation of current professional and business practices in the field of landscape architecture. For Landscape Architecture majors only. LARCH 386 Professional Practice (3) LARCH 386 has a three-part role. It comprises an introduction to the variety of practice opportunities in landscape architecture, their opportunities and drawbacks; it provides an introduction to critical office management practices; and it assists students in the employment application process through coaching on interview technique and guidance on the preparation of supporting material. It is the overarching intent of this course to help students understand what it will mean to be a professional practicing a constantly changing marketplace of ideas. Topics covered include ethics, public relations, office and project-related practices, personal and professional development, and legal aspects of practice: contracts, specifications, liability insurance. Through active participation in the course, students will come to realize the diversity inherent in the profession. Course objectives: – To introduce a range of practice types, including: small, private practice, large-scale corporate practice, federal and state agencies, not-for-profit organizations, and other non-governmental organizations; – To discuss relations with other professionals, including the formation of teams and other strategic alliances, and negotiation of professional fees; – To outline and illustrate the various roles and responsibilities individuals might have both in and outside of an office, including situations of personal vs corporate responsibility; and – To investigate the inherent values or point of view of principals and others that effect how decisions are made and change occurs.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 315

Changes Effective Fall 2022:

• Prerequisites

LARCH 414: Design and Theory V: Advanced Landscape Architectural Design (5-15 Credits: Maximum of 15 Credits)
Old Listing Effective Through Summer 2022:

Review of landscape architectural theories and issues; supports development of comprehensive design study and/or independent honors (Thesis-Based) design projects. LARCH Majors only. LARCH 414 Design and Theory V: Advanced Landscape Architectural Design (5-15) Fourth- and fifth-year design studios are designated ‘depth’ studios. Each studio is aligned with one of the department’s associated research centers or pursues special topical content and continues the development of site-scale planning and design skills for landscape architecture students with larger and more complex sites and programs. Students select a
topic from the range of options. Students may choose to take a given topic on a maximum of two occasions. Topics are related to issues that have been introduced in previous studios and are as varied as possible from studio to studio. This allows students to select a topic of interest to explore with great intensity and detail. The studio alternatives offered each year are based on faculty expertise and student interest, and are chosen by the department head’s review of faculty proposals. To date, studio topics have ranged from historic preservation to recreational landscapes, urban ecology to community planning. The type of project is determined on an individual basis, and will be rigorous and require a high level of depth of thought and a sophisticated product. Project types include regional master planning, large scale site planning and medium-scale community/housing design. The design issues emphasize urban form, community identity and open-space systems in the United States as a follow-up to urban patterns experienced during the student’s previous study abroad. The project types may include such topics as inner-city locations with mixed-use and complex programs that progress from research and planning to site-scale design. Often, students work with an actual client, such as an urban planning commission or a city economic development entity. Issues of urban form as a setting for significant practice opportunities are emphasized. Locations such as brown fields, urban entertainment districts, waterfronts, housing infill, etc., form the basis for design response in context. Course Objectives: -To develop an in-depth understanding of one or another aspect of landscape architecture. -To be exposed to the rigor and challenges of developing and implementing one’s own design expertise in the context of a specific environmental concern. -To exercise the design principles, technological tools and communication strategies developed during the course of the specific design studios.

Prerequisites: Enforced Prerequisite at Enrollment: LARCH 235 and LARCH 315 and LARCH 335

Changes Effective Fall 2022:

- Prerequisites

LER 136: Race, Gender, and Employment (3 Credits) (US) (BA)
Old Listing Effective Through Summer 2022:

This course will ask how race and gender affect work in the contemporary United States. We will consider how race and gender shape people’s work opportunities, their wages at work, and whether they participate in paid or unpaid labor (or both). We will begin with an overview of work and the changes in the workforce over time; we will move to investigate how workplace structures reproduce gender and race inequalities; will ask how race and gender inequalities are informally maintained through education systems and social networks; will consider differing dimensions of inequality across poverty, immigration, and sexuality; and will consider how studying unpaid labor helps us better understand the formal paid economy.

Cross-Listed Courses: AFAM 136 WMNST 136

Changes Effective Fall 2022:

- Course Abbreviation
- GS Attribute
- Description

LER 434: Advanced Collective Bargaining and Contract Administration (3 Credits)
Old Listing Effective Through Summer 2022:

This course examines, at an advanced level, the theory, practice, and impact of the major phases of union organizing, collective bargaining, and contract administration. Upon completion of this course students should be able describe, explain and participate, at an advanced level, in the major phases of labor relations: union organizing campaigns; collective bargaining (including its preparation phases); grievance processing; mediation; and arbitration, as practiced in industries in the U.S. private sector subject to the National Labor Relations Act, as amended, and the Railway Labor Act. Students will also develop concrete negotiation and grievance administration skills and have the opportunity to apply those skills, with the benefit of observations and feedback. Part 1 of the course reviews the structure of collective bargaining, the determination of bargaining units, and theories of effective labor negotiation. Further foundational study looks at the law applying to the
determination, compositions and scope of bargaining units, as well as the law of collective bargaining, grievance handling, and arbitration. The main body of the course introduces students to different schools of effective technique in the negotiation of labor disputes. Part 2 of the course examines the subjects and processes of collective bargaining in detail. In this portion of the course, the course requires small teams of students to conduct out-of-class exercises. The first asks students to resolve a dispute over bargaining unit determination. In this phase of the course, teams of students negotiate a comprehensive new collective bargaining agreement in a hypothetical (simulated) case study. Similarly, students will conduct an exercise in the processing of grievances through a grievance procedure and, in some case, ultimate arbitration. In the latter procedure (arbitration), students will role-play in union representative, management representative, and arbitrator roles, assigned to writing either advocates’ briefs or an arbitration award. The course will also include an exercise in the mediation/conciliation of a labor dispute.

Changes Effective Fall 2022:

- Course Abbreviation
- BA
- Prerequisites

LER 459: Collective Bargaining in Professional Sports (3 Credits)
Old Listing Effective Through Summer 2022:

Students will learn how collective bargaining works in professional sports and how it compares to bargaining in other industries.

Changes Effective Fall 2022:

- Course Abbreviation
- BA
- Description
- Prerequisites

ME 490: Professional Development for Mechanical Engineers (0.5 Credits)
Old Listing Effective Through Summer 2022:

ME 490 Professional Development for Mechanical Engineers (0.5) provides a look at foundational business issues of importance to new engineers: creating value, organizational models, financial statements, and intellectual property. Students will get a preview of their role in today’s global workplace and how they can position themselves for success. Strategies for recognizing opportunities and continually growing skills and knowledge is emphasized. The course meets once weekly for 8 weeks.

Changes Effective Fall 2022:

- Prerequisites

MUSIC 395B: Cohort Practicum II (1-1 Credits: Maximum of 1 Credit) (BA)
Old Listing Effective Through Summer 2022:

Observation and teaching experiences in a variety of musical instruction settings.

Prerequisites: MUSIC 341, MUSIC 395A, piano proficiency passed, Concurrent: MUSIC 345

Changes Effective Fall 2022:

- Prerequisites

MUSIC 429: Aural Review for Graduate Students (1 Credit) (BA)
Old Listing Effective Through Summer 2022:

An intensive review of the aural skills required for a theoretical understanding of 18th- and 19th-century music.

Prerequisite: MUSIC 221 or undergraduate core in music theory at an accredited university

Changes Effective Fall 2022:

- Remove Prerequisites

MUSIC 442W: Emphasis in Secondary General Music (3 Credits) (WF) (BA)
Old Listing Effective Through Summer 2022:

Emphasis in teaching in secondary general music settings. MUSIC 442W Emphasis in Secondary General Music (3) MUSIC 442W is offered to students who have been accepted into the Teacher Certification program in Music Education. The focus of this course is to provide students with opportunity to explore secondary general music settings under the close supervision of a faculty member. Topics include: the design and implementation of curriculum in secondary general music, the leading and teaching of songs in these settings, and specific grade-level appropriate pedagogy. The instructional format includes: lecture, small group discussion, readings, musical and teaching examples, and off campus observation and teaching in middle and high school classrooms. Students complete several practical assignments including off campus observations, presentation of the summations of small group discussions, curriculum planning and models, and teaching within public schools in grades 5-12. This is a writing intensive course with focus on a detailed, multi-drafted topic paper relating to specific elements of teaching choral and general music at the secondary level.

Prerequisites: Limited to Music Education Majors. MUSIC 345, MUSIC 395B

Changes Effective Fall 2022:

- Prerequisites

MUSIC 444W: Emphasis in Elementary and Intermediate Band (3 Credits) (WF)
Old Listing Effective Through Summer 2022:

Examination and application of teaching strategies and materials for students planning to teach band in the elementary and middle schools. MUSIC 444W Capstone Experiences in Elementary and Intermediate Band (3)(BA) This course meets the Bachelor of Arts degree requirements. The course is intended to prepare pre-service teachers to teach beginning through intermediate instrumental (band) music. Preparation will include observation of current public school teachers and teaching techniques and methods, preparation and implementation of appropriate lessons including assessments, in-depth analysis (case study) of a student currently in the public schools, development of a written philosophy of music education and band instruction, and consideration of practical matters associated with teaching in the public schools such as scheduling, recruitment and band instruction. The course serves as a capstone to the prior courses in the music education curriculum. Previous courses in instructional planning, instructional materials, instrument techniques, conducting piano and voice use will have developed necessary prior skills. Skills and concepts from these
classes will be applied in this authentic context in the collegiate and
classroom. Students will be assessed according to their effectiveness in observation, teaching preparation, teaching and
research. Evaluation will be in the form of written and verbal feedback,
and completion of rubrics by the instructor and the students themselves
towards the end of the course. Students will be spending considerable
time in local elementary and middle schools for field
work.

Prerequisites: MUSIC 345, MUSIC 395A, MUSIC 366, piano proficiency

Changes Effective Fall 2022:

• Prerequisites

MUSIC 445W: Emphasis in High School Band (3 Credits) (WF)
Old Listing Effective Through Summer 2022:

Examination and application of teaching strategies and materials for
students planning to teach high school bands. MUSIC 445W Capstone
Experiences in High School Band (3) This course is intended to prepare
pre-service teachers to teach high school band. Students will observe,
analyze, and discuss the teaching techniques, methods, and materials
used by public school teachers in high school band instructional
settings. Students will prepare and implement rehearsal plans including
assessments, in-depth investigation of appropriate repertoire for use in
high school bands and concert programming. Students will develop score
analysis skills necessary to plan and guide music making and learning
in the band rehearsal. Students will develop materials and strategies
that strengthen the connection of instrumental performance to the
public school curriculum. Students will develop a written philosophy of
music education and the role instrumental performance in band within
the music education of high school students. Students will consider
practical matters associated with teaching in the public schools such as:
scheduling, interaction with parents/teachers/administrators, parental
support organizations (music boosters), advocacy, community/school
support, and long-range instrumental music program development plans.

Prerequisites: MUSIC 345, MUSIC 395B

Changes Effective Fall 2022:

• Prerequisites

NUTR 391: Professional Preparation in Nutrition and Dietetics (2
Credits)
Old Listing Effective Through Summer 2022:

This course provides students with an introduction to current issues
in public health, the healthcare industry, professional practice and
consumer trends that impact nutrition and health careers. Students
will participate in activities during class to explore current topics in
public health and issues related to improving access, quality of care
and affordability in health care. Ethics scenarios will be presented
and discussed that are relevant to nutrition and other healthcare
practitioners. This course also prepares students to develop a set of
professional skills necessary to initiate a career in the field of dietetics
and their required field experience. This course is designed to help
students increase self-awareness, become cognizant of strengths and
weaknesses, and develop more effective communication skills. Students
will use these skills to obtain and successfully complete an advanced
field experience in nutrition (NUTR 495).

Prerequisites: Enforced Prerequisite at Enrollment: NUTR 391 and NUTR
360 Concurrent Courses: NUTR 358 and NUTR 391

Changes Effective Fall 2022:

• Abbreviated Title
• Description
• Prerequisites

NUTR 495: Advanced Field Experience in Nutrition (3 Credits)
Old Listing Effective Through Summer 2022:

NUTR 495 is intended for students to earn academic credit through
a supervised field experience in a dietetics or nutrition-related field.
Students will complete 300 hours at a site agreed upon between the
student, the field experience preceptor, and NUTR faculty member
as a result of the Field Experience Proposal developed in NUTR 391.
The primary focus of the field experience is both observational and
participatory experiential learning accompanied by onsite supervision, as
well as University-based instruction.

Prerequisites: Enforced Prerequisite at Enrollment: NUTR 391 and NUTR
360 Concurrent Courses: NUTR 358 and NUTR 391

Changes Effective Fall 2022:

• Abbreviated Title
• Description
• Prerequisites

OLEAD 410: Leadership in a Global Context (3 Credits) (IL) (BA)
Old Listing Effective Through Summer 2022:

This course explores the science and practice of leadership around the
globe through pertinent scholarly literature and related instructional
resources. OLEAD 410 Leadership in a Global Context (3) (IL)(BA)
This course meets the Bachelor of Arts degree requirements. This
course will explore the science and practice of leadership across the
globe. In particular, cross-cultural differences in leadership styles
and methods from around the planet will be examined. Emphasis
will be made on gaining knowledge of various cultural perspectives
from around the world. That knowledge will then be used to examine
successful leadership interactions between diverse cultures. Upon
completion of Leadership in a Global Context, students will be able
to understand differences within and between cultures, understand
how diversity can impact an organization; recognize there are various
sources of information to learn about culture; utilize various sources of
information to gain knowledge of culture; develop the ability to recognize
cultural differences in leadership situations, and think about developing
leadership in global situations based on culture.

Prerequisites: OLEAD 100 and 6th semester standing

Changes Effective Fall 2022:

• Prerequisites

OLEAD 411: Women and Leadership (3-3 Credits: Maximum of 3
Credits)
Old Listing Effective Through Summer 2022:

Skills and competencies needed for effective leadership may change/
 vary from one era to another, one culture to another and one industry to
another. Researchers and leaders themselves do not agree on a definition
of "leader" or the skills/competencies that establish an effective leader.
One might say that "what it takes to be an effective leader" is relative to
the situation. Through the review of literature and research on leadership
in general; review of literature and research on women in leadership;
problem-solving in leadership scenarios; and self-assessment, students will develop a working definition of leadership and identify and develop leadership traits/competencies to encourage more women to be successful future leaders.

Prerequisite: OLEAD 100 and 6th semester standing

Changes Effective Fall 2022:

- Prerequisites

PHIL 460: African American Philosophy (3 Credits) (US) (IL)
Old Listing Effective Through Summer 2022:

Major works by African American Philosophers, on topics of race, freedom, citizenship, nationhood, law and society.

Cross-Listed Courses: AFAM 460

Changes Effective Fall 2022:

- Description
- Prerequisites

PHYS 250: Introductory Physics I (4 Credits) (BA) (GN)
Old Listing Effective Through Summer 2022:

PHYS 250 Introductory Physics I (4) (GN)(BA) This course meets the Bachelor of Arts degree requirements. Algebra-based introduction to classical mechanics, including such topics as one- and two-dimensional motion, vectors, relative and circular motion, force and dynamics, Newton’s laws of motion, work and kinetic energy, potential energy and energy conservation, momentum, rotational motion and angular velocity, static equilibrium and properties of materials, static and moving fluids, vibrations, simple harmonic motion, general properties of waves, sound and human hearing, temperature and kinetic theory, heat and calorimetry, and the basic laws of thermodynamics. This course is designed to provide students with a working knowledge of the elementary physics principles mentioned above, as well as their applications to everyday phenomena and to the life sciences, to enhance their conceptual understanding of physical laws, and to increase their problem solving abilities, especially as applied to physical systems. The mathematical prerequisites for this course (and the prerequisite PHYS 250) are mathematics at the level of algebra and trigonometry, demonstrated by suitable coursework or demonstration of satisfactory performance on the mathematical proficiency exam. The exact model of instruction varies at different campuses due to different resources and class sizes. Students attend several class meetings including at least one lab or activity period per week. Students perform laboratory experiments, discuss their results, and write up their conclusions in weekly lab reports. The course is a continuation of the first-semester course PHYS 250.

Prerequisites: Enforced Prerequisite at Enrollment: PHYS 250

Changes Effective Fall 2022:

- Prerequisites

PHYS 412: Solid State Physics I (3 Credits)
Old Listing Effective Through Summer 2022:

Crystal symmetry, X-ray structure analysis, lattice vibrations, thermal properties, free electron transport theory, elementary one electron quantum theory of solids.

Prerequisites: Enforced Prerequisite at Enrollment: MATH 230 or MATH 231 or Concurrent: PHYS 410

Changes Effective Fall 2022:

- Description
- Prerequisites
- Concurrent

PSYCH 244: Introduction to the Psychology of Human Factors Engineering (3 Credits)
Old Listing Effective Through Summer 2022:

Introductory course in engineering/human factors psychology, emphasizing the application of core psychological principles and research to designing products and systems. PSYCH 244 Introduction to the Psychology of Human Factors Engineering (3) Human Factors Psychology is an area of psychology where the overall focus is the scientific study of human behavior and how it can be applied to the use, design and development of products and systems. Students will learn basic principles of how people process information, perceive and interact with the world in various circumstances. They will learn how psychologists conduct research on human thought and behavior in an effort to measure peoples’ perceptions, attitudes, and behaviors. These basic principles will be illustrated and explored with a series of hands-on activities that relate the material to everyday life. Topics to be covered include: research design and methods, sensation and perception, memory and language, and social psychology. Psychological principles from these
areas will be used to discuss ways to improve the safety of tools and systems, reduce human error and increase user satisfaction. Students will also gain a better understanding of the influence of stress and workload on human performance. A major topic will be ways to develop reliable and valid evaluation techniques for assessing performance, safety and ease of use of systems. In order to design effective systems, individual differences in age, gender and culture must be taken into account. People in different regions of the world have cultural differences that influence the way they perceive the world and process information. These individual differences will be addressed throughout the semester. Topics are presented through a combination of lectures, readings, demonstrations, and in-class activities. Active learning elements such as library/internet research, writing activities, and collaborative learning experiences will be applied. Evaluation is on the basis of content-based quizzes, objective exams, brief written reports of hands-on exercises, and collaborative assignments. A major goal of the course is to show how questions relating to proper use and design of tools, computers and other systems are addressed through empirical research. The course introduces students to theories, research, and procedures used in psychological research and practice. It also promotes students to think critically about how they can apply this knowledge to enhance their lives. After taking this course students should have more sophisticated knowledge of the relationship between the brain, our thought processes and behavior. They should be able to make more informed decisions about what makes a usable product as well gain a better appreciation of the science and profession of human factors psychology.

Changes Effective Fall 2022:

- Description

**PT 395G: Physical Therapist Assistant–Practicum III (4 Credits)**

Old Listing Effective Through Summer 2022:

PT 395G is the terminal clinical experience of the practice of physical therapist assistant skills under the direction and supervision of a licensed physical therapist and/or physical therapist/physical therapist assistant team culminating in entry level practice. Course expectations include, but are not limited to: understanding and adhering to the Standards of Ethical Conduct for the Physical Therapist Assistant and the Values-Based Behaviors for the Physical Therapist Assistant, demonstration of appropriate verbal, nonverbal and written communication, safe, effective and efficient implementation of therapeutic interventions and data collection with patients of varying complexities as outlined in the plan of care established by the physical therapist. Students will be expected to apply current knowledge, theory and clinical judgement to progress or modify patient treatment within the established plan of care. Essential skills for clinical practice will be emphasized in preparation for career entry into the current healthcare environment. This course includes both clinical experience and online learning activities that students will be expected to complete. Enrollment is limited to 2PTA major.

Prerequisites: Enforced Prerequisite at Enrollment: Grade of C or better in PT 395F

Changes Effective Fall 2022:

- Prerequisites

**RUS 400: Senior Seminar in Russian Culture (3 Credits) (IL) (BA)**

Old Listing Effective Through Summer 2022:

Senior seminar devoted to topics in Russian culture; conducted in Russian. RUS 400 Senior Seminar in Russian Culture (3) (IL)(BA) This course meets the Bachelor of Arts degree requirements. RUS 400 will be the senior seminar for Russian majors. Building on linguistic and cultural material covered in the second and third levels of study toward the Russian major, it will add depth and sophistication to the students’ understanding of basic concepts in Russian culture and improve their ability to discuss and write about these concepts in Russian. The materials for RUS 400 will be arranged chronologically and will cover the ‘big themes’ of Russian culture: e.g., the legacy of Kievan Rus, the cultural/historical preconditions for the ‘Third Rome’ theory, the rift between the people and the upper classes following Peter the Great, Westernizers versus Slavophiles, the Bolshevik Revolution, the Stalinist terror. Readings will be selected from a wide variety of genres and will reflect a diversity of linguistic styles: e.g., passages from the ancient chronicles, folk legends, memoirs and autobiography, letters, historical and literary texts. Some films will be used. Students will be evaluated on the basis of frequent quizzes and oral participation. In addition, each student will write a short research paper and present it in Russian to the class. These papers will help round out the presentation of central themes in Russian culture. Research papers might cover such topics as Andrey Rublev, religious sectarianism, peasant beliefs about nature, the biography of Lenin. Russian 400 will be a required course for both the B.A. and B.S. in Russian. Students must complete RUS 204, 214, and 304 prior to RUS 400.

Prerequisite: RUS 204, RUS 214, RUS 304

Changes Effective Fall 2022:

- Course Number to 420
- Description
- Prerequisites

**RUS 401: Advanced Russian A (3 Credits)**

Old Listing Effective Through Summer 2022:

Advanced Russian grammar, conversation, and composition. RUS 401 Advanced Russian A (3) RUS 401 is an advanced Russian language course that covers topics in grammar in the context of the spoken and written language. It is taught in Russian and serves as a complement to RUS 402. Emphasis will be placed on verbal aspect, reflexive and passive verbs, un-prefixed verbs of motion, relative pronouns, and participles. Classes will include group and individual oral presentations, analyses of written texts, and assignments using the internet to access recent oral and written materials in Russian that treat current events and illustrate particular linguistic usage. Students will also view one feature film.

Changes Effective Fall 2022:

- Credits
- Add BA and IL Attributes
- Long Title
- Description

**SC 475N: Anatomy in Italy: Cadavers, Culture, and Science (3 Credits) (GH) (GN)**

Old Listing Effective Through Summer 2022:

Anatomy is more than learning to name structures. Students will practice critical thinking and analytical skills, and develop key literacies while studying human cadavers and learning to predict a structure’s function by observing its shape, texture, and tissues. Students will practice critical and integrative thinking while discussing the historical circumstances that gave rise to, supported, and sometimes hindered the development...
of anatomy as a science by synthesizing original arguments (written and oral) that explore the evolution of anatomic science within the context of Italian history, politics, and culture. Students will also study the ethics of acquiring cadavers within contemporary and renaissance contexts, identify individual graphics and historical sculptures that demonstrate anatomic understanding, and discuss their origins and implications for renaissance-era society. Students will also develop their communication skills: presenting original posters, leading class discussions, writing term papers, and creating webcasts as part of a service project. During spring break, students will travel with the instructors to Italy and study anatomic wax specimens born through collaborations between anatomists and artists; Michelangelo's hidden anatomy in the Sistine Chapel; and the history of medicine. As preparation for their study abroad experience, students must concurrently enroll in IT 197: Italian Language and Culture for Study Abroad.

Prerequisite: Enforced Prerequisite at Enrollment: Consent of Instructor and BIOL 129 or BIOL 141 or BIOL 240w or BIOL 472 or KINES 202

Changes Effective Fall 2022:

- Prerequisites

SPLED 404: Working with Families and Professionals in Special Education (3 Credits)

Old Listing Effective Through Summer 2022:

Strategies for productive interactions between special educators and others such as colleagues, employers, parents, service providers, professionals, and students.

Prerequisite: A grade of C or better in SPLED 395W, SPLED 401, SPLED 425, SPLED 408, SPLED 411, SPLED 412, SPLED 454, SPLED 495E

Changes Effective Fall 2022:

- Prerequisites

SPLED 409A: Fundamental Literacy Skills for Students with Special Needs (3 Credits)

Old Listing Effective Through Summer 2022:

Effective reading curriculum and teaching methods to teach students with special needs. SPLED 409A Fundamental Literacy Skills for Students with Special Needs (3) Effective classroom-based assessment, curriculum development, and instructional strategies for teaching reading to educate students with special needs will be described in this course. Students will learn how to assess, develop curriculum, and provide scientifically based explicit instruction in reading to K-12 students with special needs. Students will learn how to select reading skills necessary to scaffold and enhance students' present reading skills. Methods for using science-based assessment strategies and developing foundational reading skills within a classroom context will be described. This course builds on prerequisite Special Education courses in curriculum and instructional methods. Students in SPLED 409A extend knowledge of explicit instructional strategies in the context of reading. The content offered in this course complements 409B and 409C through the integration of researched-based methods and sound instructional design within a curriculum to most effectively teach students with special needs.

Prerequisites: A grade of C or better in SPLED 404, SPLED 412, SPLED 411, SPLED 454, SPLED 495E

COREQUISITES: SPLED 409B, SPLED 409C, SPLED 495G, SPLED 418

Changes Effective Fall 2022:

- Prerequisites

SPLED 409B: Writing and Content Literacy for Students with Special Needs (3 Credits)

Old Listing Effective Through Summer 2022:

Effective curriculum and materials for teaching writing and content literacy to students with special needs. SPLED 409B Writing and Content Literacy for Students with Special Needs (3) Effective application of classroom-based measurement, curriculum development, and instructional strategies for teaching writing and content literacy to educate students with special needs will be described in this course. Students will learn how to use assessment to develop curriculum and provide scientifically based best practice instruction in writing mechanics (handwriting, spelling, capitalization & punctuation) and written expression (pre-planning to revision) to K-12 students with special needs. Students will learn how to identify, select, and teach content text structure. Methods for using assessment to develop a reading comprehension curriculum within a content classroom context and teach K-12 students with special needs to read and comprehend narrative and expository text (such as text found in Math, Science, Social Studies, and other content textbooks) will be described. Methods for using assessment to develop curriculum and teach K-12 students with special needs to respond to content text and materials through writing will also be examined. This course builds on prerequisite Special Education courses in curriculum and instructional methods. Students in SPLED 409B will have achieved mastery in basic reading theory, assessment, curriculum, and instructional methods. The content offered in this course adds to the existing course content by specifically addressing writing mechanics, written expression, and content reading. Written responses for assigned readings will be required for each topic area. Written evaluations and class assignments (including case studies) will be given to assess student learning throughout the course time period. Students' learning will be further evaluated through projects that demonstrate understandings of applying classroom-based measurement, curriculum development, and the instructional methods required to effectively teach writing and content learning to students with special needs. Student applied projects, in coordination with practicum placement, for writing instruction will include: (1) the collection of baseline writing data for a student with special needs, (2) development of a curriculum scope and sequence, (3) development of a research validated instructional intervention, (4) implementation of the intervention, (5) the collection of writing data throughout instruction and after instruction, and (6) development and implementation of an instructional plan for maintenance and generalization. To demonstrate understandings of teaching content reading and writing, students will prepare a presentation of an identified research-based content reading or writing instructional strategy or approach taught within a curriculum scope and sequence.

Prerequisites: A grade of C or better in SPLED 404, SPLED 411, SPLED 412, SPLED 454, SPLED 495E

COREQUISITES: SPLED 409A, SPLED 409C, SPLED 495G, SPLED 418

Changes Effective Fall 2022:
• Prerequisites

**SPLED 409C: Mathematics Instruction for Students with Special Needs (3 Credits)**

Old Listing Effective Through Summer 2022:

Research-based practices for teaching mathematics skills to students with special needs. SPLED 409C Mathematics Instruction for Students with Special Needs (3) Research-based assessment, instruction, and intervention strategies for teaching mathematics skills to struggling students, students with learning disabilities, and chronically low performing students will be described in this course. Students will identify (a) the risk factors associated with mathematics disabilities, (b) effective prevention and remediation models of mathematics disabilities, (c) characteristics of scientifically based instruction in content-area skills (e.g., counting, addition, fractions, problem solving, geometry, algebra) for K-12 students with disabilities, and (d) how to effectively provide and assess the effects of such instruction while provided in general and special education classrooms. This course builds on prerequisite Special Education courses in curriculum and instructional methods. Students in SPLED 409C will have achieved mastery in assessment, curriculum, and instructional methods. The content offered in this course adds to the existing course content by specifically addressing how to teach content-area skills for students with special needs. Written responses and/or online discussion board posts for assigned readings will be required for the topic areas. Written evaluations, online quizzes, and class assignments will be given to assess student learning throughout the course time period. Students learning will be further evaluated through projects that demonstrate understanding of classroom-based assessment, curriculum development, and the instructional methods required to effectively teach content-area mathematics skills to students with special needs. Student applied projects, in coordination with practicum placement, for mathematics instruction will include: (1) the collection of baseline mathematics performance data for a student with special needs, (2) development of a curriculum scope and sequence, (3) development of a research validated instructional intervention, (4) implementation of the intervention, (5) on-going data collection throughout instruction and after instruction, and (6) development and implementation of an instructional plan for maintenance and generalization. To demonstrate understandings of teaching content area mathematics skills, students will prepare a lesson on a math concept for a teaching demonstration using the instructional strategies and techniques learned during the class.

Prerequisites: A grade of C or better required in SPLED 404, SPLED 411, SPLED 412, SPLED 454, SPLED 495E

Corequisites: SPLED 409A, SPLED 409B, SPED 495G, SPLED 418

Changes Effective Fall 2022:

• Prerequisites

**SPLED 411: Intervention for Students with Severe Disabilities (3 Credits)**

Old Listing Effective Through Summer 2022:

Assessment, teaching strategies, curricula, materials, and assistive techniques for use with individuals having severe disabilities.

Prerequisites: A grade of C or better in SPLED 395W, SPLED 401, SPLED 425, SPLED 408

Corequisites: SPLED 412, SPLED 454 SPLED 495E, SPLED 404

Changes Effective Fall 2022:

• Prerequisites

**SPLED 418: Technologies for Persons with Disabilities (3 Credits)**

Old Listing Effective Through Summer 2022:

This course will teach students the role of the special education teacher in supporting the use of assistive technology (AT) by individuals with disabilities in school and community settings. Students will learn the role of the special education teacher in the AT process, including (as appropriate) how to identify student AT needs, obtain information on common AT applications and devices, make first-hand use of current AT solutions, and evaluate the use of AT to address specific student needs. Students will also learn the legal responsibilities of the special education teacher in the AT procurement and implementation process. Particular attention will be given to the use of AT to assist students with disabilities in reading, writing, math, communication, and the development of social skills. Students will learn the role and responsibilities of the special education teacher on the AT team, as well as the roles and responsibilities of the other licensed professionals on the AT team. Special attention will be given to the acquisition of strategies to engage and support the participation of family members in acquiring and implementing AT interventions. Students will also be provided with resources and strategies for making use of state and national information resources and services related to AT.

Prerequisites: A grade of C or better in SPLED 404, SPLED 411, SPLED 412, SPLED 454, SPLED 495E

Corequisites: SPLED 409A, SPLED 409B, SPED 495G, SPLED 418

Changes Effective Fall 2022:

• Prerequisites

**SPLED 419: Assistive Technology for General Education Teachers (2-3 Credits)**

Old Listing Effective Through Summer 2022:

Strategies to support use of assistive technologies by students with disabilities in general education classrooms. SPLED 419 Assistive Technology for General Education Teachers (2-3) This course will teach students the role of the general education teacher in supporting the use of assistive technology (AT) by students with disabilities in general education classrooms. Students will learn the role of the general education teacher in the AT process, including (as appropriate) how to identify student AT needs, obtain information on common AT applications and devices, make first-hand use of current AT solutions, and evaluate the use of AT to address specific student needs. Particular attention will be given to the use of AT to assist students with disabilities in reading, writing, math, communication, and the development of social skills. Students will learn the role and responsibilities of the general education teacher on the AT team, as well as issues of "scope of practice", and the roles and responsibilities of the other licensed professionals on the AT team. Students will also be provided with resources and strategies for making use of state and national information resources and services related to AT.

Prerequisite: Admission to the SPLED major

Changes Effective Fall 2022:

• Prerequisites
SPLED 495E: Experience with Exceptional Children (3 Credits)  
Old Listing Effective Through Summer 2022:

Supervised and guided field experience in a variety of possible settings (e.g. schools, day care centers, vocational settings) where students will practice lesson design, deliver instruction, and develop appropriate instructional activities, while implementing behavior management.

Prerequisites: A grade of C or better in SPLED 395W, SPLED 401, SPLED 425, SPLED 408

Corequisites: SPLED 411, SPLED 412, SPLED 454, SPLED 404

Recommended Preparations: Clearances: Act 34, Act 152, FBI, Act 24 State and PSY Mandated Reporter, TB test

Changes Effective Fall 2022:

- Prerequisites

SPLED 495G: Experience with an Integrated Inclusion Classroom  
(3-4 Credits: Maximum of 4 Credits)  
Old Listing Effective Through Summer 2022:

Supervised teaching in integrated general classrooms with activities in curriculum-based assessment, data-driven intervention, direct instruction with students in need.

Prerequisites: A grade of C or better in SPLED 404, SPLED 411, SPLED 412, SPLED 454, SPLED 495E

Corequisites: SPLED 409A, SPLED 409B, SPLED 409C, SPLED 418

Recommended Preparations: Clearances Act 34, Act 152, FBI, Act 24 State and PSU Mandated Reporter, TB test

Changes Effective Fall 2022:

- Credits
- Prerequisites

STAT 380: Data Science Through Statistical Reasoning and Computation (3 Credits)  
Old Listing Effective Through Summer 2022:

A case study-based course in the use of computing and statistical reasoning to answer data-intensive questions. STAT 380 Data Science Through Statistical Reasoning and Computation (3) This course addresses the fact that real data are often messy by taking a holistic view of statistical analysis to answer questions of interest. Various case studies will lead students from the computationally intensive process of obtaining and cleaning data, through exploratory techniques, and finally to rudimentary inferential statistics. This process will exploit students’ exposure to introductory statistics as well as the R programming language. Hence, the required prerequisites—yet novel computing and analytical techniques will also be introduced throughout the course. For the collection of data, students will learn scripting and database querying skills; for their exploration, they will employ R capabilities for graphical and summary statistics; and for their analysis, they will build upon the basic concepts obtained in their introductory statistics course. The varied case studies will elucidate additional statistical topics such as identifying sources of bias and searching for high-dimensional outliers. A possible textbook for this course is Data Science in R: A Case Studies Approach to Computational Reasoning and Problem Solving (2015) by Deborah Nolan and Duncan Temple Lang.

Prerequisites: Enforced Prerequisite at Enrollment: STAT 200 and STAT 184

Changes Effective Fall 2022:

- Prerequisites

THEA 480B: Technical Production IV (3 Credits) (BA)  
Old Listing Effective Through Summer 2022:

Discussion of problems of the technical director: personnel management, time management, scheduling, budgeting, purchasing, and the technical drawing of production.

Prerequisite: THEA 381

Changes Effective Fall 2022:

- Prerequisites

Program Changes

Accounting, B.S. (Behrend) (ACNTG_BS)  
Effective Summer 2022:

- Increased Prescribed Courses from 64 credits to 70 credits
- Added MIS 250, MIS 345 to Prescribed Courses
- Decreased Additional Courses from 20 credits to 17 credits
- Added MIS 336, MIS 344 to Additional Courses
- Decreased Supporting Courses and Related Areas from 12 credits to 9 credits

Advertising/Public Relations, B.A. (ADPR_BA)  
Effective Summer 2022:

- Changed Electives from 23 credits to 23-26 credits
- Changed Requirements for the Major from 35 credits to 35-38 credits
- Removed COMM 411 from Additional Courses in the Advertising Option
- Changed Requirements for the Public Relations Option from 21 credits to 24 credits
- Added COMM 372 to Prescribed Courses in the Public Relations Option
- Added COMM 305 to Additional Courses in the Public Relations Option
- Removed COMM 411 from Additional Courses in the Public Relations Option

African American Studies, Minor (AFAMR_UMNR)  
Effective Fall 2022:

- Added AFAM 126N/INART 126N, AFAM 207N/MUSIC 207N, AFAM 226N to Additional Courses
- Deleted ECON 436W from Additional Courses

Applied Economics, Minor (APECN_UMNR)  
Effective Fall 2022:

- Revised Program Description
- Revised Supporting Courses and Related Areas

Art History, B.A. (ARTH_BA)  
Effective Fall 2022:
• Added ART 111Z, ART 220Z to Additional Courses
• Removed ARTH 111H from Additional Courses
• Added course listings to Supporting Courses and Related Areas

**Art History, Minor (ARTH_UMNR)**
**Effective Fall 2022:**
• Revised Program Description
• Added ARTH 111Z to Additional Courses

**Biblical Studies, Certificate (BIBSTD_UCT)**
**Effective Summer 2022:**
• New certificate added

**Biobehavioral Health, B.S. (Health and Human Development, Capital, University College) (BBH_BS, BBHCA_BS, BBHUC_BS)**
**Effective Fall 2022:**
• Removed Electives
• Increased Prescribed Courses from 34 credits to 37 credits
• Decreased Additional Credits from 48-50 credits to 45-47 credits
• Moved BBH/AFAM 302 from Additional Courses to Prescribed Courses
• Added BBH 370 to Additional Courses
• Removed RLST 131 from Additional Courses

**Business, B.S. (BSBUC_BS)**
**Effective October 3, 2022:**
• Enrollment Hold implemented for Accounting option at Hazleton campus; Accounting option not accepting new students at Hazleton campus

**Communication Arts and Sciences, B.A. (CASBA_BA)**
**Effective Summer 2022:**
• Added new Integrated B.A. in Communication Arts and Sciences and M.S. in Human Resources and Employment Relations

**Communication Arts and Sciences, B.S. (CASBS_BS)**
**Effective Summer 2022:**
• Added new Integrated B.S. in Communication Arts and Sciences and M.S. in Human Resources and Employment Relations

**Communications, B.A. (Capital) (COMCA_BA)**
**Effective Spring 2023:**
• Added COMM 342W to Prescribed Courses
• Removed COMM 332 from Prescribed Courses
• Removed COMM 363 and COMM 370 from visual communication requirement in Additional Courses
• Added CC 200, COMM 473 to communications requirement in Additional Courses
• Changed COMM 495 from 1-6 credits to 3-6 credits in Additional Courses

**Communications, B.A. (University College) (COMUC_BA)**
**Effective Fall 2022:**
• Enrollment Hold implemented at Beaver and Greater Allegheny campuses; program not accepting new students at Beaver or Greater Allegheny campuses

**Computer Science, B.S. (Engineering) (CSENG_BS)**
**Effective Fall 2022:**
• Program added to Beaver, Brandywine, Hazleton campuses

**Cybersecurity Computational Foundations, Minor (CCF_UMNR)**
**Effective Fall 2022:**
• Added Entrance to Minor Requirements

**Data Sciences, B.S. (DATSC_BS, DTSC_E_BS, DTSCS_BS)**
**Effective Spring 2021:**
• Revised Program Description
• Decreased total requirements for degree completion from 125 credits to 123 credits
• Changed Electives from 5-14 credits to 0-9 credits
• Increased Requirements for the Major from 72-81 credits to 75-84 credits
• Decreased Prescribed Courses for the Major from 27 credits to 24 credits
• Added DS 435 to Prescribed Courses for the Major
• Removed DS 300, DS 440 from Prescribed Courses for the Major
• Increased Additional Courses for the Major from 10 credits to 13 credits
• Added STAT 418/MATH 418, DS 440, DS 440W to Additional Courses for the Major
• Added DS 435 to Prescribed Courses for the Major
• Removed IS 230 from Prescribed Courses for the Applied Data Sciences option
• Increased credits required for the Applied Data Sciences option from 38 credits to 41 credits
• Added DS 300 to Prescribed Courses for the Applied Data Sciences option
• Removed IST 230 from Prescribed Courses for the Applied Data Sciences option
• Increased Additional Courses for the Applied Data Sciences option from 6 credits to 9 credits
• Added CMPSC 360, DS 420, DS 494, IST 230, MATH 311W to Additional Courses for the Applied Data Sciences option
• Removed IST 445, IST 462 from Additional Courses for the Applied Data Sciences option
• Increased credits required for the Computational Data Sciences option from 44 credits to 47 credits
• Increased Prescribed Courses for the Computational Data Sciences option from 28 credits to 31 credits
• Added CMPSC 461, STAT 414/MATH 414 to Prescribed Courses for the Computational Data Sciences option
• Removed CMPSC 455 from Prescribed Courses for the Computational Data Sciences
• Increased credits required for the Statistical Modeling Data Sciences option from 35 credits to 38 credits
• Increased Prescribed Courses for the Statistical Modeling Data Sciences option from 13 credits to 16 credits
• Added STAT 414/MATH 414 to Prescribed Courses for the Statistical Modeling Data Sciences option

**Deafness and Hearing Studies, Minor (DHS_UMNR)**
**Effective August 19, 2022:**
• Enrollment Hold implemented; program not accepting new students

**Digital Journalism and Media, B.A. (DGJRM_BA)**
**Effective Spring 2023:**
• Changed Electives from 17-28 credits to 11 credits
• Increased Requirements for the Major from 34 credits to 40 credits
• Increased Prescribed Courses from 16 credits to 19 credits
• Added COMM 180, COMM 260W, COMM 269 to Prescribed Courses
• Removed COMM 403, COMM 428A from Prescribed Courses
• Increased Additional Courses from 6 credits to 9 credits
• Added COMM 310/IST 310, COMM 364, COMM 403, COMM 492, COMM 282, COMM 460W, COMM 467 to Additional Courses
• Removed COMM 100N, COMM 180, COMM 230W, COMM 260W from Additional Courses
• Added COMM 228, COMM 461 to Supporting Courses and Related Areas
• Removed COMM 180, COMM 215, COMM 169, COMM 270, COMM 310, COMM 337, COMM 342W, COMM 346, COMM 428B, COMM 460W, COMM 467, COMM 475, COMM 487W, COMM 492, COMM 493 from Supporting Courses and Related Areas

**Digital Media Trends and Analytics, Minor (DMTA_UMNR)**
**Effective Fall 2022:**
• Moved COMM 310 from Prescribed Courses to Additional Courses
• Added COMM 422 to Additional Courses

**Diversity Studies, Certificate (Liberal Arts) (DIVSTD_UCT)**
**Effective Spring 2023:**
• Added PSYCH 422 to Additional Courses

**East European Studies, Minor (EEST_UMNR)**
**Effective Fall 2022:**
• Changed Requirements for the Minor from 22-31 credits to 26-28 credits
• Changed Additional Courses from 10-16 credits to 11-16 credits
• Added RUS 200, RUS 401 to Track 1 in Additional Courses
• Added UKR 3, POL 1, POL 2, POL 3, RUS 1, RUS 2 to Track 2 in Additional Courses
• Removed RUS 410 from Track 2 in Additional Courses
• Added POL 3, UKR 1, UKR 2, RUS 1, RUS 2 to Track 3 in Additional Courses
• Added RUS 3, RUS 410, POL 1, POL 2, UKR 1, UKR 2, UKR 3 to Track 4 in Additional Courses
• Revised Supporting Courses and Related Areas

**Elementary Education, B.El.Ed. (ELEM_BELED)**
**Effective Summer 2022:**
• Revised Program Description
• Revised Entrance to Major Requirements

• Changed total requirements for degree completion for the PK-4 Early Childhood Option from 134 credits to 139 credits
• Changed total requirements for degree completion for the Grade 4-8 English/Language Arts and Reading Option from 132 credits to 137 credits
• Changed total requirements for degree completion for the Grade 4-8 Mathematics Option from 137 credits to 139 credits
• Changed total requirements for degree completion for the Grade 4-8 Social Studies Option from 135 credits to 137 credits
• Changed Requirements for the Major from 132-142 credits to 131-141 credits
• Added 0-6 credits of Electives
• Decreased Prescribed Courses for the Major from 71 credits to 67 credits
• Added EDUC 385 to Prescribed Courses for the Major
• Removed EDUC 320, SPLED 404 from Prescribed Courses for the Major
• Changed EDUC 490 from 12 credits to 9 credits in Prescribed Courses for the Major
• Changed EDUC 495B from 1 credit to 3 credits in Prescribed Courses for the Major
• Increased Additional Courses for the Major from 21 credits to 24 credits
• Added HDFS 229 and HDFS 239 to Additional Courses for the Major
• Increased Supporting Courses and Related Areas for the Major from 13-18 credits to 13-21 credits
• Added EDUC 477, EDUC 452, SPLED 404, SPLED 409C to Supporting Courses and Related Areas for the Major
• Removed SPLED 409A, SPLED 409B, SPLED 418 from Supporting Courses and Related Areas for the Major
• Added EDUC 320 to Prescribed Courses in the PK-4 Early Childhood Education Option
• Removed HDFS 229 from Prescribed Courses in the PK-4 Early Childhood Education Option
• Added AA 193N, AFAM 141N/ENGL 141N/INART 141N, AMST 150N, APLNG 220N, ARTH 224N/ENGL 224N, CMLIT 109, CMLIT 130, CMLIT 140, CMLIT 153, CMLIT 183O/SC 183Q, ENGL 103, ENGL 112, ENGL 129, ENGL/SC 142N, ENGL 161N/HIST 162N, ENGL 165N, ENGL/POLSC 183N, ENGL 184, ENGL 185, ENGL 189, ENGL 223N, ENGL 228, ENGL/CHEM 233N, ENGL 236N, ENGL 237N, HDFS 254N, LLED 215N to Additional Courses in the PK-4 Early Childhood Education Option
• Removed CMLIT 184, CMLIT 185, CMLIT 189, ENGL 2, ENGL 129H, ENGL 139 from Additional Courses in the PK-4 Early Childhood Education Option
• Added EDUC 320, LLED 420 to Prescribed Courses in the English/Language Arts and Reading (4-8) Option
• Removed EDUC 322, HDFS 239 from Prescribed Courses in the English/Language Arts and Reading (4-8) Option
• Changed the Mathematics (4-8) Option from 32 credits to 29 credits
• Decreased Prescribed Courses in the Mathematics (4-8) Option from 23 credits to 20 credits
• Removed HDFS 239 from Prescribed Courses in the Mathematics (4-8) Option
• Added ENGL 194H to Additional Courses in the Mathematics (4-8) Option
• Removed ENGL 101, ENGL 139 from Additional Courses in the Mathematics (4-8) Option
• Changed the Social Studies (4-8) Option from 30 credits to 27 credits
• Decreased Prescribed Courses in the Social Studies (4-8) Option from 24 credits to 21 credits
• Removed HDFS 239 from Prescribed Courses in the Social Studies (4-8) Option
• Added AA 193N, AFAM/ENGL/INART 141N, AMST 150N, APLNG 220N, ARTH/ENGL 224N, CMLIT 130, CMLIT 140, CMLIT 153, CMLIT 183Q/SC 183Q, ENGL 112, ENGL 142N/SC 142N, ENGL 161N/HIST 162N, ENGL 165N, ENGL 183N/PLSC 183N, ENGL 194H, ENGL 223N, ENGL 236N, ENGL 237N, HDFS 254N, LL ED 215N to Additional Courses in the Social Studies (4-8) Option
• Removed ENGL 2, ENGL 104/JST 104, ENGL 139, ENGL 140 from Additional Courses in the Social Studies (4-8) Option

**Energy Finance, Certificate (ENFIN_UCT)**

**Effective Fall 2022:**

- Revised Program Description
- Added EBF 301 and MET 436 to Required Courses
- Removed FIN 419 from Required Courses

**English, B.A. (Altoona) (ENGAL_BA)**

**Effective Fall 2022:**

- Removed Traditions of Innovation option from Penn State Altoona, the Altoona College
- Added Writing and Literature in Context option to Penn State Altoona, the Altoona College

**English, B.A. (University College) (ENGUC_BS)**

**Effective Spring 2022:**

Program phased out at Wilkes-Barre campus

**Effective Summer 2022:**

- Enrollment Hold implemented at Wilkes-Barre campus; program not accepting new students at Wilkes-Barre campus

**Entrepreneurship and Innovation, Minor (ENTI_UMNR)**

**Effective Fall 2022:**

- Added BIOL 431 to the Bio-Tech Cluster
- Added BA 322, MGMT 365, MGMT 451, MGMT 453 to the New Ventures Cluster
- Removed BLAW 243 from New Ventures Cluster

**Health Humanities, B.A. (HHUM_BA)**

**Effective Summer 2022:**

- New program added

**Health Humanities, B.S. (HHUM_BS)**

**Effective Summer 2022:**

- New program added

**Information Sciences and Technology, A.S. (Information Sciences and Technology, Berks, University College) (2IST_AS, 2ISBK_AS, 2ISUC_AS)**

**Effective Fall 2022:**

- Added Application Development Option and Cybersecurity Option
- Renamed Individualized Option to Custom Option
- Phased out the Baccalaureate Option
- Added Generalized Business Option to Greater Allegheny campus
- Networking Option phased out at York campus
- Added Custom Option to DuBois campus
- Revised Program Description
- Changed General Education credits included in Requirements for the Major from 9-12 credits to 6-9 credits
- Changed Electives from 4-7 credits to 0-5 credits
- Changed Requirements for the Major from 44-46 credits to 43-47 credits
- Changed Common Requirements for the Major from 29 credits to 31-33 credits
- Changed Prescribed Courses for the Major for 25 credits to 18 credits
- Added CAS 100, IST 140 to Prescribed Courses for the Major
- Removed CAS 100B, CMPSC 101, IST 110, IST 250 from Prescribed Courses for the Major
- Changed Additional Courses for the Major from 4 credits to 13-14 credits
- Added IST 250, IST 256, IST 495, MATH 21, MATH 22, MATH 26, MATH 110, MATH 140, SCM 200, CYBER 100, CYBER 100S, HCDD 113, HCDD 113S, IST 110, SRA 111 to Additional Courses for the Major
- Added 0-1 credits of Supporting Courses and Related Areas for the Major
- Changed Requirements for the Option from 15-17 credits to 12-14 credits
- Changed Generalized Business Option from 15-16 credits to 12-14 credits
- Changed Additional Courses in the Generalized Business Option from 15-16 credits to 12-14 credits
- Added BA 301, FIN 301, BA 302, SCM 301, BA 303, MKTG 301, BA 304, MGMT 301, BA 243, BLAW 243, BA 241, BA 242 to Additional Courses in the Generalized Business Option
- Removed ACCTG 151, ACCTG 152, BA 250, ECON 14, MATH 21, MATH 22, MATH 26, MATH 37, MGMT 100, MGMT 321, MGMT 341, MKTG 220, MKTG 221, MKTG 310, MKTG 327 from Additional Courses in the Generalized Business Option
- Changed Individualized Option (Custom Option) from 15 credits to 12 credits
- Changed Supporting Courses and Related Areas in the Individualized Option (Custom Option) from 15 credits to 12 credits
- Changed Networking Option from 15 credits to 12 credits
- Changed Prescribed Courses in the Networking Option from 15 credits to 12 credits
- Removed Additional Courses section from Networking Option

**Information Sciences and Technology, B.S. (Information Sciences and Technology) (ISTBS_BS)**

**Effective Fall 2022:**

- Information Technology: Integration & Application Option phased out at University Park campus

**Information Sciences and Technology, B.S. (Abington, Berks, University College) (ISSAB_BS, ISSBK_BS, ISSUC_BS)**

**Effective Summer 2022:**

- New program added
• Program phased out at Penn State Abington, the Abington College; Penn State Berks, the Berks College; and University College

**Information Sciences and Technology for Communication Arts and Sciences, Minor (ISCAS_UMNR)**
*Effective Summer 2022:*
• Program phased out

**Information Systems, B.S. (INFSY_BS)**
*Effective Fall 2022:*
• Revised Program Description
• Revised Entrance to Major Requirements
• Increased total requirements for degree completion from 120 credits to 121 credits
• Increased Requirements for the Major from 79 credits to 94 credits
• Changed General Education credits included in Requirements for the Major from 12 credits to 18 credits
• Removed Electives
• Increased Prescribed Courses from 49 credits to 61 credits
• Added CAS 100, IST 140, MIS 301, IST 431, MIS 446, MIS 495 to Prescribed Courses
• Removed MIS 204, MIS 448, MIS 465 from Prescribed Courses
• Increased Additional Courses from 24 credits to 27 credits
• Added ENGL 15, ENGL 30H, ESL 15, MIS 204, MIS 250 to Additional Courses
• Removed Application Development Concentration and Network Security Concentration from Additional Courses
• Added Systems Design Concentration, Data and Business Analytics Concentration, and Computing Security Concentration to Additional Courses
• Removed CMPSC 101, CMPSC 121, IST 140 from Additional Courses
• Removed IST 302, IST 451, IST 456, MIS 413, MIS 446, MIS 461, MIS 466, MIS 489 from Individualized Concentration in Additional Courses

**Information Systems and Statistical Analysis, Minor (ISSA_UMNR)**
*Effective Fall 2022:*
• Revised Program Description
• Revised Entrance to Minor Requirements
• Changed the Requirements for the Minor from 37 credits to 27 credits
• Increased Prescribed Courses from 7 credits to 9 credits
• Removed ACCTG 211 from Prescribed Courses
• Moved FIN 301 and SCM 301 from Additional Courses to Prescribed Courses
• Increased Additional Courses from 18 credits to 6 credits
• Added IB 470 to Additional Courses
• Removed BA 301, BA 302, BA 303, BA 304, IB 440, MGMT 301 and MKTG 301 from Additional Courses
• Revised Supporting Courses and related Areas section

**Letters, Arts, and Sciences, A.A. (Liberal Arts, Abington, Altoona, Behrend, Berks, Capital, University College) (2LAS_AA, 2LAAB_AA, 2LAAL_AA, 2LABC_AA, 2LABK_AA, 2LACA_AA, 2LAUC_AA)**
*Effective Summer 2022:*
• Program name changed to Multidisciplinary Studies, A.A.

**Letters, Arts, and Sciences, B.A. (Liberal Arts, Abington, Altoona, University College) (LAS_BA, LASAB_BA, LASAL_BA, LASUC_BA)**
*Effective Summer 2022:*
• Program name changed to Multidisciplinary Studies, B.A.

**Mathematics, B.A. (Altoona) (MTAAL_BA)**
*Effective June 15, 2022:*
• Enrollment Hold implemented at Penn State Altoona, the Altoona College; program not accepting new students at Penn State Altoona, the Altoona College

**Mathematics, B.S. (Altoona) (MTSAL_BS)**
*Effective June 15, 2022:*
• Enrollment Hold implemented at Penn State Altoona, the Altoona College; program not accepting new students at Penn State Altoona, the Altoona College

**Mechanical Engineering, B.S. (Engineering, Altoona) (ME_BS, MEENG_BS, MEAL_BS)**
*Effective Summer 2021:*
• Decreased Prescribed Courses from 83-84 credits to 82-83 credits
• Added ME 435 to Prescribed Courses
• Removed CMPSC 200 from Prescribed Courses
• Changed ME 348 from 4 credits to 3 credits in Prescribed Courses
• Increased Additional Courses from 18 credits to 19 credits
• Added BIOL 161, CMPSC 200, CMPSC 201 to Additional Courses
• Removed CAS 100, EMCH 316, ME 315, ME 325, ME 355, ME 375, ME 442W, ME 443W from Additional Courses
• Added ME 435 to Supporting Courses and related Areas section

**Mining Technology, A.S. (2MNGT_AS)**
*Effective July 28, 2022:*
• Enrollment Hold removed
Nursing, B.S.N. (NURS_BSN)  
**Effective Fall 2022:**
- Revised Program Description
- Added R.N. to B.S.N. option
- Changed Electives from 5-9 credits to 3-9 credits
- Changed Requirements for the Major from 87-92 credits to 87-93 credits
- Changed General Education credits included in Requirements for the Major from 21-22 credits to 21 credits
- Changed Requirements for the Option from 57-60 credits to 57-61 credits
- Increased Prescribed Courses in the General Nursing Option from 54 credits to 57 credits
- Added NURS 302, NURS 480 to Prescribed Courses in the General Nursing Option
- Removed Supporting Courses and Related Areas from the General Nursing Option
- Added NURS 302, NURS 480 to Prescribed Courses in the Second Degree Option
- Decreased credits for NURS 495 from 6 credits to 3 credits in Prescribed Courses in the Second Degree Option

Nursing, R.N. to B.S.N. (NURN_BSN)  
**Effective Summer 2022:**
- Program phased out

Nutritional Sciences (NUTR_BS)  
**Effective Summer 2022:**
- Added new Integrated B.S. in Nutritional Sciences and M.P.S. in Nutritional Sciences
- Added new Integrated B.S. in Nutritional Sciences and M.P.H. in Public Health

**Effective Fall 2022:**
- Added HM 230 to Prescribed Courses in the Nutrition and Dietetics Option
- Removed HM 329 from Prescribed Courses in the Nutrition and Dietetics Option

Occupational Therapy, A.S. (University College, Berks) (2OTUC_AS, 2OTBK_AS)  
**Effective Fall 2022:**
- Revised Entrance to Major Requirements
- Added Retention Requirements
- Increased total requirements for degree completion from 69 credits to 71 credits
- Increased Requirements for the Major from 60 credits to 62 credits
- Increased Prescribed Courses from 57 credits to 59 credits
- Added OT 295B to Prescribed Courses
- Removed KINES 13, OT 395 B from Prescribed Courses
- Changed OT 212 from 3 credits to 4 credits in Prescribed Courses
- Changed OT 214 from 3 credits to 4 credits in Prescribed Courses
- Changed OT 295E from 1 credits to 2 credits in Prescribed Courses

Organizational Leadership, B.A. (OLBA_BA)  
**Effective Summer 2022:**
- Changed Electives from 21-24 credits to 9-14 credits
- Changed Requirements for the Major from 36-37 credits to 40-41 credits
- Increased Prescribed Courses from 12 credits to 21 credits
- Added OLEAD 201, OLEAD 210, PSYCH 100, PSYCH 484 to Prescribed Courses
- Removed OLEAD 409 from Prescribed Courses
- Increased Additional Courses from 12-13 credits to 16 credits
- Added IST 110, PHIL 10, LHR 202, PSYCH 281 to Additional Courses
- Removed MGMT 321, PSYCH 484 from Additional Courses
- Decreased Supporting Courses and Related Areas from 12 credits to 3-4 credits
- Removed CAS 404, CAS 452, CAS 475, CRIM 100, CRIM 113, CRIM 482, LER 100, 136, 201, LER 312, LER 400, LER 434, LER 435, LER 437, LER 458Y, LER 460, MGMT 321, PHIL 103, PHIL 119, PLSC 1, PLSC 490, PSYCH 484, PSYCH 485, SOC 207, SOC 404, SOC 455, SOC 456 from Supporting Courses and Related Areas

Organizational Leadership, B.S. (OLBS_BS)  
**Effective Summer 2022:**
- Changed Electives from 16-18 credits to 20-21 credits
- Changed Requirements for the Major from 64-66 credits to 61-62 credits
- Added LHR 312, OLEAD 201, OLEAD 210, PSYCH 484 to Prescribed Courses
- Removed CAS 352, ECON 102, ECON 104, OLEAD 409, PHIL 10, PSYCH 281 from Prescribed Courses
- Changed credits for Additional Courses from 12-13 credits to 15 credits
- Added PHIL 10, IST 110, LHR/AFAM/WMNST 136, OLEAD 220, OLEAD 410, OLEAD 411, WMNST 105N, LHR 202, PSYCH 281, LHR 437, BA 100, LHR 427 to Additional Courses
- Removed LER 312, SOC 207, MGMT 321, PSYCH 484 from Additional Courses
- Removed CAS 404, CAS 452, CAS 475, CRIM 100, CRIM 113, CRIM 482, LER 100, LER 136, LER 201, LER 312, LER 400, LER 434, LER 435, LER 437, LER 458Y, LER 460, MGMT 321, PHIL 103, PHIL 119, PLSC 1, PLSC 490, PSYCH 484, PSYCH 485, SOC 207, SOC 404, SOC 455, SOC 456 from Supporting Courses

Pharmacology and Toxicology, B.S. (TOX_BS)  
**Effective Fall 2022:**
- Decreased total requirements for degree completion from 124 credits to 120 credits
- Changed Requirements for the Major from 92-94 credits to 88-91 credits
- Decreased Prescribed Courses from 78 credits to 71 credits
- Added BIOL 240W, BIOL 472, CHEM 213W, VBSC 431 to Prescribed Courses
- Removed BIOL 240W, BIOL 472, CHEM 213, VBSC 451 from Prescribed Courses
- Increased Additional Courses from 5-7 credits to 8-11 credits
- Added BIOL 141, BIOL 240W to Additional Courses
Physical Therapist Assistant, A.S. (2PTA_AS)
Effective Summer 2022:
• Program phased out at DuBois campus

Effective Fall 2022:
• Revised Entrance to Major Requirements
• Added Retention Requirements
• Decreased Prescribed Courses from 45 credits to 41 credits
• Increased Additional Courses from 16 credits to 20 credits
• Moved PT 395F from Prescribed Courses to Additional Courses
• Added PT 395H and PT 395I to Additional Courses

Plastics Engineering Technology, B.S. (PLTBC_BS)
Effective Summer 2022:
• Changed Requirements for the Major from 105 credits to 106 credits
• Changed Electives from 2 credits to 1 credit
• Changed PLET 345 from 2 credits to 3 credits in Prescribed Courses

Effective Fall 2022:
• Revised Entrance to Major Requirements
• Added Retention Requirements
• Changed total requirements for degree completion from 68 credits to 67 credits
• Changed Requirements for the Major from 62 credits to 61 credits
• Decreased Supporting Courses and Related Areas from 9 credits to 8 credits
• Changed RADSC 295C and RADSC 295F from 2 credits to 1.5 credits in Supporting Courses and Related Areas

Political Science, B.A. (Altoona) (PLSAL_BA)
Effective June 15, 2022:
• Enrollment Hold implemented at Penn State Altoona, the Altoona College; program not accepting new students at Penn State Altoona, the Altoona College

Psychological and Social Sciences, B.A. (PSSBA_BA)
Effective Fall 2022:
• Revised Supporting Courses and Related Areas

Psychological and Social Sciences, B.S. (PSSBS_BS)
Effective Fall 2022:
• Changed Electives from 15-17 credits to 8 credits
• Changed Requirements for the Major from 67-68 credits to 71 credits
• Decreased Supporting Courses and Related Areas from 9 credits to 8 credits
• Changed RADSC 295C and RADSC 295F from 2 credits to 1.5 credits in Supporting Courses and Related Areas

Political Science, B.A. (Altoona) (PLSAL_BA)
Effective June 15, 2022:
• Enrollment Hold implemented at Penn State Altoona, the Altoona College; program not accepting new students at Penn State Altoona, the Altoona College

Psychological and Social Sciences, B.A. (PSSBA_BA)
Effective Fall 2022:
• Revised Supporting Courses and Related Areas

Psychological and Social Sciences, B.S. (PSSBS_BS)
Effective Fall 2022:
• Changed Electives from 15-17 credits to 8 credits
• Changed Requirements for the Major from 67-68 credits to 71 credits
• Decreased Supporting Courses and Related Areas from 9 credits to 8 credits
• Changed RADSC 295C and RADSC 295F from 2 credits to 1.5 credits in Supporting Courses and Related Areas

Real Estate, B.S. (REST_BS)
Effective Fall 2022:
• New program added

Russian, B.A. (RUS_BA)
Effective Fall 2022:
• Changed Program Description
• Increased Requirements for the Major from 28 credits to 29 credits
• Decreased Electives from 23 credits to 22 credits
• Increased Prescribed Courses from 13 credits to 17 credits
• Removed RUS 400 from Prescribed Courses
• Added RUS 420 to Prescribed Courses
• Decreased Additional Courses from 15 credits to 12 credits
• Moved RUS 401 from Additional Courses to Prescribed Courses
• Removed RUS 402, RUS 403 from Additional Courses

Russian, Minor (RUS_UMNR)
Effective Summer 2022:
• Revised Program Description
• Added Entrance to Minor requirements
• Increased Requirements for the Minor from 19 credits to 20 credits
• Increased Prescribed Courses from 7 credits to 11 credits
• Added RUS 401 to Prescribed Courses
• Added RUS 101N, RUS 110, RUS 144, RUS 145 to Additional Courses
• Decreased Supporting Courses and Related Areas from 9 credits to 6 credits

Russian Translation, B.S. (RUST_BS)
Effective Fall 2022:
• Program phased out

Russian Translation, Minor (RUST_UMNR)
Effective Fall 2022:
• Program phased out

Science, B.S. (Altoona) (SCIAL_BS)
Effective June 15, 2022:
• 485, PSYCH 496B, SOC 3, SOC 30, SOC 35, SOC 103, SOC 109, SOC 110, SOC 309, SOC 403, SOC 406, SOC 429, SOC 430, SOC 455, and WMNST 471 from Supporting Courses and Related Areas
• Enrollment Hold implemented at Penn State Altoona, the Altoona College; program not accepting new students at Penn State Altoona, the Altoona College

Science, B.S. (Science) (SCBS_BS)
Effective Summer 2022:
• Life Sciences option phased out at University Park campus

Social Work, BSW (SOCWK_BSW)
Effective Summer 2022:
• New program added

Statistics, B.S. (STAT_BS)
Effective Summer 2022:
• Changed total requirements for degree completion from 124 credits to 120 credits
• Changed Requirements for the Major from 80-95 credits to 81-94 credits
• Added 0-1 credits of Electives
• Increased Common Requirements for the Major (All Options) from 38-41 credits to 39-42 credits
• Increased Prescribed Courses for the Major from 37-38 credits to 38-39 credits
• Increased the number of credits for STAT 184 in Prescribed Courses for the Major from 1 credit to 2 credits
• Added STAT 300, STAT 400 to Prescribed Courses for the Major
• Removed STAT 461, STAT 462 from Prescribed Courses for the Major
• Changed STAT 470 to STAT 470W in Prescribed Courses for the Major
• Changed the Actuarial Statistics Option from 53 credits to 48 credits
• Added CMPSC 131, BBH/HPA 440, CMPSC 448, RM 415, RM 420 to Additional Courses in the Actuarial Statistics Option
• Removed CMPSC 202 from Additional Courses in the Actuarial Statistics Option
• Changed Supporting Courses and Related Areas in the Actuarial Statistics Option from 13 credits to 8 credits
• Changed the Applied Statistics Option from 47 credits to 42 credits
• Added CMPSC 131, BBH/HPA 440, CMPSC 448, RM 415, RM 420 to Additional Courses in the Applied Statistics Option
• Removed CMPSC 202 from Additional Courses in the Applied Statistics Option
• Changed Supporting Courses and Related Areas in the Applied Statistics Option from 32 credits to 27 credits
• Changed the Biostatistics Option from 56-57 credits to 50-52 credits
• Added CMPSC 131, BBH/HPA 440, CMPSC 448, RM 415, RM 420 to Additional Courses in the Biostatistics Option
• Removed CMPSC 202 from Additional Courses in the Biostatistics Option
• Changed Supporting Courses and Related Areas in the Applied Statistics Option from 19-20 credits to 14-15 credits
• Changed the Graduate Study Option from 47 credits to 42 credits
• Added CMPSC 131, BBH/HPA 440, CMPSC 448, RM 415, RM 420 to Additional Courses in the Graduate Study Option
• Removed CMPSC 202 from Additional Courses in the Graduate Study Option
• Changed Supporting Courses and Related Areas in the Graduate Study Option from 14 credits to 9 credits

Telecommunications and Media Industries, B.A. (TELCM_BA)
Effective Summer 2022:
• Added COMM 170, COMM 305, COMM 388, COMM 482 to Additional Courses
• Removed COMM 242, COMM 404, COMM 492 from Additional Courses
• Added COMM 305 to Supporting Courses and Related Areas
• Removed COMM 403, COMM 411 from Supporting Courses and Related Areas

Theatre, B.A. (THRBA_BA)
Effective Fall 2022:
• Decreased Requirements for the Major from 40.5-42 credits to 36.5-38 credits
• Changed Electives from 12-13.5 credits to 16-17.5 credits
• Decreased Prescribed Courses from 12 credits to 11 credits
• Changed THEA 289 from 2 credits to 1 credit in Prescribed Courses
• Removed THEA 220 from Acting selection in Additional Courses
• Added THEA 220 to Theatre and Performance Praxis selection in Additional Courses
• Removed THEA 220 from Acting selection in Additional Courses
• Added DANCE 381 to Theatre and Performance Praxis selection in Additional Courses
• Removed DANCE 381 from Theatre and Performance Praxis selection in Additional Courses
• Changed THEA History and Theory selection from 1.5 credits to 2 credits in Additional Courses
• Removed History and Theory selection from Additional Courses
• Added Theatre and Dance History selection and Literature and Theory selection to Additional Courses
• Decreased Dance Theory and Technique selection from 8.5-9 credits to 6-7 credits in Additional Courses
• Changed DANCE 221 from 1 credit to 1.5 credits in Dance Theory and Technique selection in Additional Courses

Worklink Strategies and Employability, Certificate (WKLNK_UCT)
Effective Summer 2022:
• New certificate added