<table>
<thead>
<tr>
<th>CRN</th>
<th>COURSE_TITLE</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>MODE</th>
<th>DESCRIPTION</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY1410</td>
<td>Space and Time Capstone</td>
<td>PSY Psychology</td>
<td>3</td>
<td>Lecture</td>
<td>Communication-intensive seminar integrating knowledge on space and time. Integrated Writing course.</td>
<td>L</td>
</tr>
<tr>
<td>PLS5420</td>
<td>Campaign Internship</td>
<td>PLS Political Science</td>
<td>3</td>
<td>Lecture</td>
<td>Volunteer for the candidate of one's choice in a local, state, or federal election. Work 170 hours over the semester, adjusting hours to account for the campaign calendar.</td>
<td>L</td>
</tr>
<tr>
<td>HST5000</td>
<td>Intro-Archive Manuscript</td>
<td>HST History</td>
<td>3</td>
<td>Lecture</td>
<td>Fundamental problems, theoretical principles, techniques, and practical administration of archives and manuscripts; the importance of records in the modern information age and the relationship of archives administration and records management; history of archives.</td>
<td>L</td>
</tr>
<tr>
<td>KIN1000</td>
<td>Backpacking</td>
<td>KIN Kinesiology &amp; Health</td>
<td>1</td>
<td>Lecture</td>
<td>Fundamental skills and knowledge of Backpacking. Competency-based approach. Course may accommodate disabled students when appropriate.</td>
<td>L</td>
</tr>
<tr>
<td>CMI1010</td>
<td>Intro to Chemistry Lab</td>
<td>CMY Chemistry</td>
<td>0</td>
<td>Lecture</td>
<td>Required laboratory for CMY 1010.</td>
<td>L</td>
</tr>
<tr>
<td>ARA2200</td>
<td>Intermediate Arabic II</td>
<td>ARA Arabic</td>
<td>3</td>
<td>Lecture</td>
<td>Grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.</td>
<td>L</td>
</tr>
<tr>
<td>BMS7410</td>
<td>Strain couplet Org Chem</td>
<td>BMS Biomedical Sciences</td>
<td>2</td>
<td>Lecture</td>
<td>Study of molecular orbital theory, reactive species, theories of acids and bases, and an introduction to stereochemistry.</td>
<td>L</td>
</tr>
<tr>
<td>ENG5500</td>
<td>Fuel Cell Sci and Tech</td>
<td>ME Mechanical and Materials Eng</td>
<td>5</td>
<td>Lecture</td>
<td>This course will cover the fundamentals, technologies, and applications of various types of fuel cells. The fundamentals covered are thermodynamic prediction, electrolyte conduction, and electrode kinetics. The types of fuel cells covered are polymer electrolyte fuel cell, solid oxide fuel cell, and molten carbonate fuel cell. Department Managed Prerequisite(s): Undergraduate level MEE 2750 Minimum Grade of D+ or Undergraduate level ME 310 Minimum Grade of D or Undergraduate level ME 3310 Minimum Grade of D or Undergraduate level ME 3750 Minimum Grade of D or Undergraduate level ME 5750 Minimum Grade of D+.</td>
<td>L</td>
</tr>
<tr>
<td>NUA2110</td>
<td>Applied Music</td>
<td>NUA Music</td>
<td>1</td>
<td>Lecture</td>
<td>Music - Applied Music: Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.</td>
<td>L</td>
</tr>
<tr>
<td>ATR4610</td>
<td>Org in Admin in AT</td>
<td>ATR Athletic Training</td>
<td>4</td>
<td>Lecture</td>
<td>Knowledge, skills, and dispositions required of the entry-level Certified Athletic Trainer to develop, organize, and manage an athletic training facility. Professional development will also be addressed.</td>
<td>L</td>
</tr>
<tr>
<td>PRH1300</td>
<td>Geospatial Tech in P.H</td>
<td>PRH Population &amp; Public Health</td>
<td>3</td>
<td>Lecture</td>
<td>This course prepares students to use geospatial technologies within the framework of Public Health issues. Topics covered include geographic information systems (GIS), global positioning system (GPS), remote sensing, spatial analysis, project design, data management, basic cartographic principles, case studies and a project. At completion, students will have a basic understanding of how to incorporate geospatial technologies into real-world Public Health applications.</td>
<td>L</td>
</tr>
<tr>
<td>PSY2320</td>
<td>Ecological Interface Des</td>
<td>PSY Psychology</td>
<td>6</td>
<td>Lecture</td>
<td>Examination of critical factors in the design of effective computer interfaces, including display, from a cognitive systems engineering and ecological interface design perspective. Design principles discussed include direct perception, direct manipulation, and visual momentum.</td>
<td>L</td>
</tr>
<tr>
<td>EDS4500</td>
<td>UAV Flight Control Lab</td>
<td>EIE Electrical Engineering</td>
<td>4</td>
<td>Lecture</td>
<td>Laboratory supporting EIE 4500/6500. Students will experience hands on learning in lab environment. Designing, implementing, and testing autonomous Unmanned Aerial Vehicles (UAV's) under the guidance of the Department Managed Prerequisite(s). Undergraduate level EE 4130 Minimum Grade of D and Undergraduate level EE 4130 Minimum Grade of D and Undergraduate level ECE 1190 Minimum Grade of D or Undergraduate level ECE 3170 Minimum Grade of D+ or Undergraduate level ECE 5170 Minimum Grade of D+.</td>
<td>L</td>
</tr>
<tr>
<td>NUR341C</td>
<td>Org-Rung-nink-Gmp Mh</td>
<td>NUR NURSING</td>
<td>0</td>
<td>Lecture</td>
<td>Clinical course for NUR 341.</td>
<td>L</td>
</tr>
<tr>
<td>EDS2620</td>
<td>Dev patt w_UCG/PDSN</td>
<td>EDS EDUCATION</td>
<td>3</td>
<td>Lecture</td>
<td>Family partnerships and advocacy in early childhood special education and early intervention.</td>
<td>L</td>
</tr>
<tr>
<td>ACC4602</td>
<td>Fin Statement Analysis</td>
<td>ACC Accountancy</td>
<td>3</td>
<td>Lecture</td>
<td>Financial Statement presentations are analyzed from an accounting perspective with heavy emphasis on footnote analysis and the impact on the financial statements.</td>
<td>L</td>
</tr>
<tr>
<td>RHE2500</td>
<td>Wellness for Frontline - &amp; HRS</td>
<td>RHE Rehabilitation</td>
<td>4</td>
<td>Lab</td>
<td>Wellness for front-line workers; associated with stress - Social - emotional - behavioral approaches to enhance overall wellness and lessen life stress.</td>
<td>L</td>
</tr>
<tr>
<td>BLMT300</td>
<td>Year 2 Medical Study</td>
<td>BLMT School of Medicine</td>
<td>24</td>
<td>Lecture</td>
<td>Examines development and current practice of Chinese foreign policy. Special attention given to China-U.S. relations, as well as China's role in international and regional organizations. Integrated Writing course.</td>
<td>L</td>
</tr>
<tr>
<td>PLS4500</td>
<td>Chinese Foreign Policy</td>
<td>PLS POLITICAL SCIENCE</td>
<td>4</td>
<td>Lecture</td>
<td>Introduction to astronomy and the space sciences from the viewpoint of the amateur astronomer. Emphasizes both aesthetic and scientific aspects, and the amateur's enthusiasm for the subject.</td>
<td>L</td>
</tr>
<tr>
<td>BLMT700</td>
<td>Astronomy K-12 Teacher</td>
<td>BLMT ENVIRONMENTAL SCIENCE</td>
<td>4</td>
<td>Lecture</td>
<td>Introduction to astronomy and the space sciences from the viewpoint of the amateur astronomer. Emphasizes both aesthetic and scientific aspects, and the amateur's enthusiasm for the subject.</td>
<td>L</td>
</tr>
<tr>
<td>CMI110</td>
<td>Applied Chemical Spectroscopy</td>
<td>CMI CHEMISTRY</td>
<td>3</td>
<td>Lecture</td>
<td>Fundamental skills and knowledge of Backpacking. Competency-based approach. Course may accommodate disabled students when appropriate.</td>
<td>L</td>
</tr>
<tr>
<td>STT460</td>
<td>Ind/Real Stat and Prob</td>
<td>STT STATISTICS</td>
<td>1</td>
<td>Lecture</td>
<td>Independent study in statistics and probability.</td>
<td>L</td>
</tr>
<tr>
<td>MUS5500L</td>
<td>Rock &amp; Roll Lab</td>
<td>MUS Music</td>
<td>1</td>
<td>Lecture</td>
<td>Builds upon the previously gained conducting experiences and knowledge and experience in conducting.</td>
<td>L</td>
</tr>
<tr>
<td>ART3760</td>
<td>Subtractive Proc ART</td>
<td>ART Art</td>
<td>3</td>
<td>Lecture</td>
<td>Development of personal concepts and aesthetic expression in sculpture, with focus on subtractive processes. Emphasizes theoretical and perceptual issues, such as the relationships between objects and the process of their making, and the choice and manipulation of materials. This course has a fee that is non-refundable once the term begins.</td>
<td>L</td>
</tr>
<tr>
<td>RTS3600</td>
<td>3D Digital Modeling</td>
<td>RTS INFORMATION TECHNOLOGY</td>
<td>3</td>
<td>Lecture</td>
<td>Fundamental topics of 3D digital modeling will be explored in both a virtual and 3D printing environment. Will learn how to use software, and will build an animated model that will be exported into an on-line 3D printing and loaded into a 3D virtual environment and augmented reality app.</td>
<td>L</td>
</tr>
<tr>
<td>PRH4100</td>
<td>Behavior Change Interventions</td>
<td>PRH POPULATION &amp; PUBLIC HEALTH</td>
<td>3</td>
<td>Lecture</td>
<td>Incorporates theory and practice to develop an understanding about (1) health behaviors, (2) the deliberate approach for promoting health behavior change through health interventions, (3) the processes of health behavior interventions; (4) the processes of planning, implementing and evaluating health appropriate interventions to promote health behavior changes within populations.</td>
<td>L</td>
</tr>
<tr>
<td>HST525C</td>
<td>Exhibit Design History</td>
<td>HST HISTORY</td>
<td>3</td>
<td>Lecture</td>
<td>Teaches principles of museum exhibit design using design software and culminating in the development of small-scale exhibit plans.</td>
<td>L</td>
</tr>
<tr>
<td>LEP212</td>
<td>Writing Workshop Level 2</td>
<td>LEP ENGLISH</td>
<td>0</td>
<td>Lecture</td>
<td>Writing workshop (revision, editing and lab) for low-intermediate/intermediate ESL students. This course has a fee that is non-refundable once the term begins.</td>
<td>L</td>
</tr>
<tr>
<td>ENG2500</td>
<td>Visual Digital Architecture</td>
<td>ENG ENGLISH</td>
<td>4</td>
<td>Lecture</td>
<td>Instruction and experience in designing effective print and online documents. Integrated Writing course.</td>
<td>L</td>
</tr>
<tr>
<td>PLS5450</td>
<td>Ind Field Research</td>
<td>PLS POLITICAL SCIENCE</td>
<td>4</td>
<td>Lecture</td>
<td>Supervised individual projects. May involve intern programs, field research or other specialized projects. Requires 3.0 GPA.</td>
<td>L</td>
</tr>
<tr>
<td>EDE3000</td>
<td>Phonics &amp; Word Study P-5</td>
<td>EDE EDUCATION</td>
<td>3</td>
<td>Lecture</td>
<td>An in-depth analysis of how children in P-5 learn phonics and word study, and use this knowledge while reading and writing.</td>
<td>L</td>
</tr>
<tr>
<td>EOL9000</td>
<td>Pracum &amp; Sup EOL Educational Leadership</td>
<td>3</td>
<td>Lecture</td>
<td>The practicum provides significant opportunities for candidates to synthesize and apply knowledge and skills identified in the district-level standards through student-centered, standards-based, high-quality instruction in real settings.</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>KIN1100</td>
<td>Bowling</td>
<td>KIN KINESIOLOGY &amp; HEALTH</td>
<td>1</td>
<td>Lecture</td>
<td>Fundamental skills and knowledge of Bowling. Competency-based approach. Course may accommodate disabled students when appropriate. This course has a fee that is non-refundable once the term begins.</td>
<td>L</td>
</tr>
<tr>
<td>EDG4730</td>
<td>IS Student Teaching</td>
<td>EDG EDUCATION</td>
<td>9</td>
<td>Clinical</td>
<td>Candidate, under the direct supervision of an experienced intervention specialist, is assigned to a school for an intensive teaching experience in grades K-12 special education for students with moderate needs.</td>
<td>L</td>
</tr>
<tr>
<td>TH5330</td>
<td>Computer Graphics</td>
<td>TH THEATRE</td>
<td>3</td>
<td>Lecture</td>
<td>Introduction to computer-aided design programs. Basic skills developed through several projects including orthographic projections, designer's elevations, groundplanes and light plots.</td>
<td>L</td>
</tr>
<tr>
<td>NUR0000</td>
<td>Nur Honors Ind Study</td>
<td>NUR NURSING</td>
<td>1</td>
<td>Lecture</td>
<td>Under the guidance of a faculty member, students implement and complete the honors project proposed in NUR 4480 by taking variable credits of 1-4 semester hours which can be repeated over several semesters. Program requires a minimum total of 24 semester hours but may be extended to a maximum of 44 semester hours.</td>
<td>L</td>
</tr>
<tr>
<td>BMS7030</td>
<td>Research Ethics</td>
<td>BMS BIOLOGICAL SCIENCES</td>
<td>0.5</td>
<td>Lecture</td>
<td>Also listed as BMN 703; Research ethics emphasizes the evaluation of hypothetical ethical scenarios in biomedical research. Class discussion is based on integrating ethical policy and practice as they relate to research at Wright State and beyond.</td>
<td>L</td>
</tr>
<tr>
<td>EGR4660</td>
<td>Special Topics in EGR</td>
<td>EGR ENGINEERING</td>
<td>1</td>
<td>Lecture</td>
<td>Special topics in Engineering and Computer Science.</td>
<td>L</td>
</tr>
<tr>
<td>PTH6600</td>
<td>Lean Six Sigma, Green Belt</td>
<td>PTH PHARMACOLOGY</td>
<td>3</td>
<td>Lecture</td>
<td>An introduction to the tools and techniques of the lean six sigma philosophy of management that focuses on eliminating waste and defects through practices that emphasize understanding, measuring, and improving processes. The course will teach students to statistically solve common quality problems and improve processes.</td>
<td>L</td>
</tr>
<tr>
<td>PTH4620</td>
<td>Health Program Plan &amp; EPR</td>
<td>PTH POPULATION &amp; PUBLIC HEALTH</td>
<td>3</td>
<td>Lecture</td>
<td>This course develops a health education knowledge and skills base for planning, implementing, and evaluating community health programs. Awareness, behavioral, social, educational, clinical, and community-level approaches to enhance health behaviors and reduce health disparities.</td>
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<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Department</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>CHM3510</td>
<td>Biokinetics/Biodynamics</td>
<td>BIO</td>
<td>3</td>
<td></td>
<td>Private singing lessons for acting, theatre studies and dance majors only.</td>
<td></td>
</tr>
<tr>
<td>ECE7170</td>
<td>Systems Analysis</td>
<td>MTH</td>
<td>3</td>
<td></td>
<td>Focus on modern views on fiscal and monetary policy in an open economy. Interrelationships between trade, unemployment, economic growth, inflation, and balance of payments. Highlighted for Department Managed Program(s).</td>
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</tr>
<tr>
<td>ECT1020</td>
<td>Orientation to Education</td>
<td>ED</td>
<td>3</td>
<td></td>
<td>Introduction to methods and grammatical concepts necessary for further study in Latin.</td>
<td></td>
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</tbody>
</table>
This course offers an introduction to the field of probabilistic machine learning. Examples are drawn from sensor signal exploitation, biology, text processing, computer vision, and robotics. Key

The course will explore the role of religion in society. Religion seems not only as a functional institution within our social structure, but also as a meeting point of various social networks and emotional bonds. It examines the influence that various religions have on society and in turn, the effect of social structure and culture on religion. Attention given to American religion as well as religion in other cultures.

Projects may include (but are not limited to) implementation and/or robust testing of software or hardware artifacts relevant to the field, preparation of project reports and/or conduct of novel research, collection, curation and analysis of real-world or simulation data of value to the research community, or authoring a comprehensive review of the state of the art in a specific research area.

Projects may include (but are not limited to) implementation and/or robust testing of software or hardware artifacts relevant to the field, preparation of project reports and/or conduct of novel research, collection, curation and analysis of real-world or simulation data of value to the research community, or authoring a comprehensive review of the state of the art in a specific research area.

The course introduces the concepts and tools for analyzing and modeling: scaling in space and time, feedback, and self-organization in environmental systems including: ecology, hydrology, global climate change, and geochemical systems.

Participants will develop study skills for academic success as they practice reading skills and strategies with reading passages used to produce various forms of composition necessary for college work, including writing summaries, expository essays, and essay tests. Students will work on perfecting the grammatical and mechanical forms considered appropriate for these college writing tasks.

This course has a fee that is non-refundable once the term begins.
**Courses in Spring 2023**

**HIST4880** 4880 **History and New Media**

**Course Description:** Examines the impact of new media on access to primary sources, public programs, history education, scholarship, and the ways in which historians engage with each other. Presents productions in a variety of media. Integrated writing course.

**INTEG3200** 3200 **English Composition**

**Course Description:** Students will produce a portfolio integrating knowledge, skills, and principles regarding the writing and revision of original fiction.

**PSY2010** 2010 **Ecology Integration I**

**Course Description:** Focus in on increasing awareness so that students can have meaningful dialogues about cultural similarities and differences and ground their thinking in post-modern, constructionist theory. Explores the complex integration of multiple identities.

**EDG4740** 7430 **Seminar on Teaching Theory**

**Course Description:** Reading, research and discussion of current theories in the field of comparison and rhetoric focusing on topics such as composition studies, literacy studies, social nature of language, and politics of assessment.

**ART4880** 4880 **Adv Printing & Lithography**

**Course Description:** Development of personalized concepts and individual aesthetic expression in printmaking. This course is free that is non-refundable once the term begins. (In Department: Managed Prerequisite(s): Undergraduate level ART 3660 Minimum Grade of C or (Graduate level ART 3660 Minimum Grade of C or-

**KIN3780A** 1100A **Walk-Jog-Run**

**Course Description:** Fundamental skills and knowledge of Walk-Jog-Run. Competency-based approach. Course may accommodate limited students when appropriate.

**AMST1177** 1177 **Humanities/Mechanics Extrm**

**Course Description:** Introduction of multiple facets of health care, sleep, diet, and physical activity related to the need for specialized training in art and space design. Concepts of flight, anatomy, physiology, aircraft and spacecraft systems and the working relationship of humans to extreme environments are researched through scientific inquiry. The discipline research completed in ANT 6030 to develop a research proposal could, potentially, advance the selected biomedical field. (In Department: Managed Prerequisite(s): Graduate level ANT 6030 Minimum Grade of C or-

**AMST6100** 6100 **Biomedical Experimental Design II**

**Course Description:** Students must have completed Biomedical Review Committee (ANT 6030) in order to take this course. ANT 6030 sets the foundation for what the Presentation will be focused on. Students will utilize the literature research compiled in ANT 6030 to develop a research proposal that could potentially advance the selected biomedical field. (In Department: Managed Prerequisite(s): Graduate level ANT 6030 Minimum Grade of C or-

**EDL7711** 7711 **Ldrship & Imprent STEM**

**Course Description:** Develops strong base of understanding in organizational structure for skill building in leadership, communication, decision-making, and problem-solving. Educational renewal; sustainability leadership; political consideration; professional development; ethical issues; and professional contexts.

**EDLS7410** 7410 **Econ for Business Econ**

**Course Description:** The course will investigate various cultural, environmental, ethical and national groupings, while attempting to uncover unity behind the great diversity of the subcontinent.

**ART4660** 4660 **Adv Printmkg: Lithograph**

**Course Description:** Develops strong base of understanding in organizational structure for skill building in leadership, communication, decision-making, and problem-solving.

**ART1000** 1000 **Introduction to Art**

**Course Description:** Introduction to the variety of people living in Southern Asia, particularly India, Pakistan, Bangladesh and Sri Lanka. The course will investigate various cultural, environmental, ethical and national groupings, while attempting to uncover unity behind the great diversity of the subcontinent.

**MUS3250** 3250 **Choral Conducting**

**Course Description:** Three practical laboratory experiences in three week rotations. The students will spend 3 weeks in 3 laboratories and each rotation will be concluded with a 2 page summary report of the laboratory. Upon completion the Phonix Toc students should have laboratory copies to complete their work.

**ART4930** 4930 **Art Prof's Contem Art**

**Course Description:** Current anthropogenic contamination distribution in the groundwater as investigated in recent developments. Emphasizes conceptual and advanced understanding of experimental procedures in chemical and microbial processes, which directly affects the mobility and fate of the contaminants in soil and water. (In Department: Managed Prerequisite(s): Undergraduate level EES 2510 Minimum Grade of C or-

**PLS4900** 4900 **Constitutional Law**

**Course Description:** Examines cases in which provisions of the constitution have been judicially interpreted. Also examines federal systems, powers of states and limits on government.

**ENG1910** 1910 **Arts Doc/Dem Dec Lin**

**Course Description:** Advanced studies exploring the use of appropriate, meaningful data for making instructional, curricular, and assessment decisions as a normative professional standard.

**ENG2350** 2350 **Sound Design**

**Course Description:** Introduction to the craft and art of sound design. Emphasizes on physics of sound, sound flow, basic equipment usage and maintenance. Includes theory and practice for both recorded and identified sounds and live sound for the theatre.

**PSY2050** 2050 **PSY Core Topics**

**Course Description:** Introduces students to the core topics of psychology and the role of psychology in society. The course will cover topics such as: psychology and society; psychology and culture; psychology and law; psychology and education; psychology and health; psychology and technology; and psychology and the environment.

**EDG2860** 2860 **Workshops in Education of Professional Development**

**Course Description:** Workshop in selected areas of professional development taught through a highly interactive and intensive reading and discussion oriented to the needs of those attending. Topics include: professional development, program evaluation, research methods, and the integration of knowledge from different disciplines.

**MUS4925** 4925 **Concert Band**

**Course Description:** Performs band music of all styles. Open to all students with audition.

**REL3240** 3240 **Asian Religions Ecology**

**Course Description:** An examination of Asian religious perspectives (Confucianism, Daoism, Buddhism, and Hinduism) on the meaning and value of the natural world and the relationship between human beings and nature. Focus will be on environmental ethics in comparative Asian perspectives.

**MUS4260** 4260 **Intro to Lab Science**

**Course Description:** A first exposure to laboratory design and procedures to enable elementary control strategies in a laboratory environment. (In Department: Managed Prerequisite(s): Undergraduate level MUS 2250 Minimum Grade of C or-

**CHEM2220** 2220 **Inorganic Chemistry**

**Course Description:** Inorganic Chemistry; the study of the properties and reactions of substances with fixed compositions. Emphasis is placed on the development of a coherent understanding of the principles of inorganic chemistry, and the ability to apply these principles to solve problems. (In Department: Managed Prerequisite(s): Undergraduate level EES 2510 Minimum Grade of C or-

**CHS1240** 1240 **1st Year Seminar**

**Course Description:** A first exposure to laboratory design and procedures to enable elementary control strategies in a laboratory environment. (In Department: Managed Prerequisite(s): Undergraduate level MUS 2250 Minimum Grade of C or-

**DST7350** 7350 **MEAS Thesis Research**

**Course Description:** Students may be enrolled in the thesis research course for up to 6 credits in the same term. Students may not receive credit for both the thesis research course and the thesis research course for the same term. (In Department: Managed Prerequisite(s): Undergraduate level DST 7000 Minimum Grade of C or-

**PSY4130** 4130 **Intro to Private Practice**

**Course Description:** Overview of the administration, scoring, and interpretation of several projective techniques including projective drawings, Incomplete Sentence Blanks, the Thematic Apperception Test (TAT), the Children's Apperception Test (CAT), and other testing techniques used in psychological assessment.

**BMS9900** 9900 **Biomedical Sciences Sem**

**Course Description:** Examines a broad range of contemporary scientific, social, and ethical issues in the field of biotechnology. Focuses on the role of biotechnology in society, including social and ethical implications of biotechnology.

**FRG2100** 2100 **Intermediate French I**

**Course Description:** Grammar review, reading, and discussion of selected text and film shorts, with practice in speaking and writing the language. Taught in French. (In Department: Managed Prerequisite(s): Undergraduate level FR 1030 Minimum Grade of C or-

**MIC1520** 1520 **Concepts in Chem II**

**Course Description:** Corequisite with MIC 1520. Concepts in Chemistry II. The course is designed to provide students with a comprehensive understanding of the fundamental principles of chemistry. Emphasis is placed on the development of problem-solving skills and the ability to apply this knowledge to real-world situations.

**THA4100** 4100 **Choral Conducting**

**Course Description:** A first exposure to laboratory design and procedures to enable elementary control strategies in a laboratory environment. (In Department: Managed Prerequisite(s): Undergraduate level MUS 2250 Minimum Grade of C or-

**MUS2250** 2250 **Choral Conducting**

**Course Description:** A first exposure to laboratory design and procedures to enable elementary control strategies in a laboratory environment. (In Department: Managed Prerequisite(s): Undergraduate level MUS 2250 Minimum Grade of C or-
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CHM 8980</td>
<td>Thesis Research</td>
<td>Progress and completion of a research project which is suitable for publication.</td>
</tr>
<tr>
<td>MUS 1110</td>
<td>Theory of Music II</td>
<td>Theoretical study of music through written exercises including melody, harmony, rhythm, form and analysis.</td>
</tr>
<tr>
<td>PGE 5101</td>
<td>Biomechanics of Damaging Agents</td>
<td>A large number of therapeutic, occupational, and environmental agents can cause damage to genetic DNA and various toxic and mutagenic effects in cells. This course focuses on molecular and cellular mechanisms of DNA damage formation and the pathways that cells employ to repair and respond to genetic damage. Topics will also cover the human diseases and disorders that result from defects in the DNA damage response as well as the application of DNA damaging agents to therapeutic purpose.</td>
</tr>
<tr>
<td>PRL 3209</td>
<td>Sociological Research Methods</td>
<td>(Also listed as SOC 3110) General treatment of social as a religious institution, examining the influence of religious ideas and organizations on other social institutions and the influence of religion on society.</td>
</tr>
<tr>
<td>BIO 3320</td>
<td>Vertebrate Zoology</td>
<td>4 Basic structures of vertebrates: anatomy and functional morphology, major adaptations and phylogenetic constraints. Major radiation of vertebrate groups during geological, climatic, and biogeographical events. Current threats to various vertebrate groups, such as habitat loss, loss of genetic diversity, and invasive species.</td>
</tr>
<tr>
<td>EE 7270</td>
<td>Field Ed Seminar II</td>
<td>Integrates Field Education experiences and coursework. Offered concurrently with advanced graduate fieldwork and comprehensive exam.</td>
</tr>
<tr>
<td>ENG 6750</td>
<td>Undergraduate Research</td>
<td>Biochemical and molecular biological research in a faculty member's laboratory.</td>
</tr>
<tr>
<td>FAS 3110</td>
<td>Agriculture Marketing</td>
<td>Marketing of grain and livestock along with the products derived from them. Fundamental and practical applications on marketing agricultural commodities. Topics include future, basis, commodity trading, and marketing.</td>
</tr>
<tr>
<td>KINH 1620</td>
<td>Exercise Science</td>
<td>Fundamental skills and knowledge of Stretch &amp; Tone/Pilates. Competency-based approach. Course may accommodate disabled students when appropriate.</td>
</tr>
<tr>
<td>PSY 6620</td>
<td>Con&amp;Inn in Pr Ca Se</td>
<td>3 To provide students with explicit (textbook) and (teacher) experienced knowledge of behavioral health service provision in an integrated primary care clinic serving a low-income population of patients. The course will be a combination of textbook readings and discussions as well as laboratory component. The lab component will involve instructor supervision of student's shadowing and observation of primary care providers, conducting initial consultation appointments, practicing behavioral and cognitive interventions, and providing feedback to referring providers.</td>
</tr>
<tr>
<td>DAN 3010</td>
<td>Pointe Class</td>
<td>Emphasizes pointe work for the female dancer to develop strength on pointe for classical ballet.</td>
</tr>
<tr>
<td>EDS 3090</td>
<td>Dys Mult-Sensory Instruction</td>
<td>Provides insight-depth knowledge regarding dynamic history, theory, brain-based research, methodologies, instruction, affective instruction, second language, phonics knowledge, research-supported instructional procedures and an overall holistic understanding of learners with diverse learning needs.</td>
</tr>
<tr>
<td>BMS 7425</td>
<td>Rehab Enln Computers II</td>
<td>Continuation of BMS 7415. Focuses on development of computer application programs and assistive devices for people with disabilities.</td>
</tr>
<tr>
<td>MTE 6640</td>
<td>History of Mathematics</td>
<td>Mathematics as an ongoing human activity. Historical development and contributions from diverse cultures of numbers, systems, algorithms, Euclidean and non-Euclidean geometries, calculus, differential equations, probability, and statistics.</td>
</tr>
<tr>
<td>PL 4770</td>
<td>International Orgs</td>
<td>Examines the theoretical perspectives on international organizations and the structure, functions, and the evolving role of key international organizations. Integrated Writing course.</td>
</tr>
<tr>
<td>DCS 9990</td>
<td>Internship in Org Studies</td>
<td>An immersive learning experience that broadens and deepens the students' knowledge, skills, and dispositions of the organizational executive level, while meeting didactic program outcomes.</td>
</tr>
<tr>
<td>WGS 3700</td>
<td>Feminist Theory</td>
<td>Analysis of how influential feminist thinkers from 18th to 21st centuries. Examine major questions, debates, and issues concerned by feminist theorists.</td>
</tr>
<tr>
<td>URS 7530</td>
<td>Organization Theory</td>
<td>Analysis of the fundamental behavioral concepts and processes involved in public sector organizations. Examine approaches towards major behavioral processes and their management.</td>
</tr>
<tr>
<td>BIO 4730</td>
<td>Marine Biology</td>
<td>Oceanic ecosystem dynamics and the biological communities associated with different marine habitats. Emphasizes structural and physiological adaptations of organisms to their environment and interactive among different species (competition, predation, and mutualism). Current threats to marine habitats. Includes a 1 week field trip to the North Carolina coast.</td>
</tr>
<tr>
<td>MGT 7280</td>
<td>Multisc. Qualitative Methods</td>
<td>Structural optimization of large scale systems with constraint approximations, sensitivity analysis, and design variable linking methods. Primarily, data and optimality criteria methods for shape and size optimization, 3 hour lecture (0-10 Directed Teaching Practicum). Graduate level ME 6810 Minimum Grade of D and Graduate level ME 6210 Minimum Grade of D and Graduate level ME 7100 Minimum Grade of D, Graduate level ME 7100 Minimum Grade of D.</td>
</tr>
<tr>
<td>LDR 6020</td>
<td>Supervision in Org</td>
<td>Study of organizational strategic planning and practices. Includes development of strategic plans for organizations.</td>
</tr>
<tr>
<td>ED 4800</td>
<td>AYA Prof Seminar</td>
<td>Seminar accompanying AYA Student Teaching focusing on pedagogical content knowledge and the completion of submission of the edTPA.</td>
</tr>
<tr>
<td>CSE 2501R</td>
<td>Rctrctr for MTH 2501</td>
<td>Reception for MTH 2501.</td>
</tr>
<tr>
<td>EE 2720</td>
<td>Laboratory Electrical Engineering</td>
<td>The goal of the course is to provide a rigorous introduction to the exciting world of applied/hand-on learning systems and the application of adaptive techniques in control of dynamic systems with parametric uncertainty. Students will develop first-hand experience in the use of adaptive control techniques via computer simulations.</td>
</tr>
<tr>
<td>ITD 2400</td>
<td>Employment Portfolio</td>
<td>Development of effective (e)strategies including application forms, cover letters, and resumes. Development of a multimedia portfolio.</td>
</tr>
<tr>
<td>TNG 2040</td>
<td>Fund of Management</td>
<td>Management skills, global management skills, organizational behavior, communication and technology management skills.</td>
</tr>
<tr>
<td>ANR 7000</td>
<td>Anatomy Seminar</td>
<td>Two seminars (Anatomy Seminar and Lab) are concurrent with the Department of Neuroscience, Cell Biology and Physiology Seminar Series.</td>
</tr>
<tr>
<td>KGF 7090</td>
<td>Golf</td>
<td>Fundamental skills and knowledge of Golf. Competency-based instruction. Course may accommodate disabled students when appropriate.</td>
</tr>
<tr>
<td>HST 7400</td>
<td>Special Topic Seminar</td>
<td>Examines special topics in the advanced study of history. Topics vary.</td>
</tr>
<tr>
<td>FAS 2700</td>
<td>Internship in Dis</td>
<td>Food and Agricultural Systems</td>
</tr>
<tr>
<td>EDC 3400</td>
<td>Language Arts for MCE</td>
<td>A development and integrated approach to teaching language arts (reading, writing, speaking &amp; listening, and language) for middle level classroom, grades 4-6. Includes development of appropriate objectives, planning, resource facilitation, evaluation, and trends.</td>
</tr>
<tr>
<td>GER 1100</td>
<td>German Conversation I</td>
<td>Emphasis of the culture of the German-speaking world.</td>
</tr>
<tr>
<td>ART 4620</td>
<td>Art Concepts in AT</td>
<td>Advanced knowledge, skills and dispositions required of the entry-level Certified Athletic Trainer and application of that knowledge.</td>
</tr>
<tr>
<td>PGE 3440</td>
<td>Black U Culture</td>
<td>Representative works in English from the Black diaspora.</td>
</tr>
<tr>
<td>PSY 9890</td>
<td>Research Methods</td>
<td>Supervised thesis research.</td>
</tr>
<tr>
<td>ACC 7470</td>
<td>Current Topics in Accounting</td>
<td>This course is an overview of issues directly impacting the accounting profession or issues impacting business that indirectly affect the accounting profession.</td>
</tr>
<tr>
<td>ASM 7520</td>
<td>Aerospace Skills I</td>
<td>This is the second in a series of three courses designed to bridge traditional didactic education and experience obtained in the classroom and practical experience gained in the workplace. This course includes human factors concepts and their integration and application to aerospace accident investigation. Contemporary accident investigation classification and utilization of the Division of Flight Standards aircraft accident investigation methodologies.</td>
</tr>
<tr>
<td>PHE 6300</td>
<td>Medical Ethics</td>
<td>This is an interdisciplinary course that brings together fundamental concepts of bioethics, molecular biology, cell biology and cell physiology of eukaryotic cells and applies this knowledge to explaining disease mechanisms.</td>
</tr>
<tr>
<td>BME 4985</td>
<td>Special Topics in BME I</td>
<td>Undergraduate special topics in advanced biomedical engineering. Topics vary.</td>
</tr>
<tr>
<td>SCM 3340</td>
<td>Global SCM</td>
<td>Management of the logistics function in supply chains, including physical distribution activities such as transportation, facility location and materials handling.</td>
</tr>
<tr>
<td>EDL 9990</td>
<td>Prac Ed</td>
<td>Candidates explore various educational leadership topics/issues and their relationship to peers.</td>
</tr>
<tr>
<td>MUS 4550</td>
<td>Basic Critical Thinking</td>
<td>Theory and application of human biochemistry and principles of chemical techniques used in the analysis of blood and other body fluids.</td>
</tr>
</tbody>
</table>

Section: Spring 2023
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>College</th>
<th>Attributes</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM4370</td>
<td>Electroanalytical Chem</td>
<td>CHM</td>
<td>Lecture</td>
<td>4.0</td>
<td>Fundamental principles of electrochemistry and the application of electrochemical methods to chemistry and chemical analysis.</td>
</tr>
<tr>
<td>CSD2870</td>
<td>CSD Practicum I</td>
<td>CSD (Community Services Development)</td>
<td>Workshop</td>
<td>2.0</td>
<td>Exploring career development from a discipline-specific orientation.</td>
</tr>
<tr>
<td>BIO3150</td>
<td>Invertebrate Zoology</td>
<td>BIO</td>
<td>Lecture</td>
<td>3.0</td>
<td>Required laboratory for BIO 3150.</td>
</tr>
<tr>
<td>KNI1150</td>
<td>Soccer Master Class</td>
<td>KNI</td>
<td>Lecture</td>
<td>1.0</td>
<td>Advanced skills and knowledge of SOCC: Master Trainer. Competency-based approach. Course may accommodate students when appropriate.</td>
</tr>
<tr>
<td>EIE3211</td>
<td>Analog Circuit Techniques</td>
<td>EIE</td>
<td>Lecture</td>
<td>3.0</td>
<td>Electrical quantities and their relationships, impedance models of basic circuit elements, Conservation laws leveraging algebraic solutions, Algebraic models of dynamic systems via Laplace calculus.</td>
</tr>
<tr>
<td>EIB5310</td>
<td>Reading Laboratory in Special Areas of American, English, or World Literature in Translation, and English Language and Linguistics not available through course structure. Limited to senior English majors</td>
<td>FAS2010</td>
<td>Lecture/Lab Combination</td>
<td>3.0</td>
<td>Introduction to the principles, theories and method of textbook design including instruments, control, design, electricity and technology.</td>
</tr>
<tr>
<td>EGR3580</td>
<td>Tech Comm for EG 3 &amp; CS</td>
<td>EGR</td>
<td>Lecture</td>
<td>3.0</td>
<td>Overview of current theory, research, and techniques of psychology for children and adolescents with special emphasis on behavior therapy, play therapy, group therapy, family therapy, and marital therapy.</td>
</tr>
<tr>
<td>ENG1010</td>
<td>Lower Body Assessment</td>
<td>ATR</td>
<td>Lecture/Lab Combination</td>
<td>2.0</td>
<td>Group class introduction to Functional Anatomy, Exercise Science and Career counseling. Group counseling.</td>
</tr>
<tr>
<td>EGR5440</td>
<td>Child Psychotherapy</td>
<td>PSY</td>
<td>Lecture</td>
<td>3.0</td>
<td>Review of the fossil and archaeological records and the genetic evidence for human evolution, and examination of evolutionary principles and current issues addressed by paleoanthropology.</td>
</tr>
<tr>
<td>ELE1710</td>
<td>Stage Lighting I</td>
<td>TH</td>
<td>Lecture</td>
<td>1.0</td>
<td>Students build a body of knowledge in digital finance in both computers and networks by increasingly seeking advanced fundamentals. Group general questions including: (i) how to collect them, (ii) how to interpret and use them, and (iii) how to actively design new mechanisms to facilitate forensics. Students will develop practical skills by using various forensics analysis tools.</td>
</tr>
<tr>
<td>ENG7130</td>
<td>Discourse Analysis</td>
<td>ENG</td>
<td>Lecture</td>
<td>3.0</td>
<td>Development of advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required.</td>
</tr>
</tbody>
</table>
Spring 2023

**DMV9999** 9500 For Administrative Use Only
**DMV** **DMV Consortium** 0

**ARIT2120** 2110 Painting for Non-Majors
**ART** **Art** 3

**MTH1530** 5150 Scientific Computation
**MTH** **Mathematics** 3

**ARJ3210** 3110 Arabic Conversation I
**ARA** **Arabic** 1

**NUR7732** 7732 Adv/Nurs Assmt/Assn
**NUR** **Nursing** 4

**EDES70** 4570 Multi-Age TESOL
**EDS** **Education** 3

**NEU2300** 3200 How Nerv Sys Works II
**NEU** **Neuroscience** 4

**EDES60** 8600 Arr. In Sci Methods
**EDS** **Education** 6

**PHL3150** 5100 American Philosophy
**PHL** **Philosophy** 3

**CIS9999** 8999 Practicant Candidate
**CS** **Computer Science** 1

**NUR3260** 2260 Band Methods/Var/Sr
**MUS** **Music** 4

**BME2730** 7360 NIR Spectroscopy & Imaging
**BME** **Biomedical Sciences** 3

**PSY4120** 6220 Developmental Psychology
**PSY** **Psychology** 3

**RDL3300** 3300 Topics in Islam
**REL** **Religion** 3

**NUR7122** 7122 Not Available
**NUR** **Nursing** 8

**URS4200** 4200 Nonprofit Administration
**URS** **Urban Affairs** 4

**SOC2310** 3150 Individual and Society
**SOC** **Sociology** 3

**NUR4421C** 4421C Crisis Intervnr Crit Uplift Clin
**NUR** **Nursing** 0

**KNH3200** 3200 100 I. 2D Design & Drawing
**KNH** **Kinesiology & Health** 3

**ECE4170** 7410 Power Electronics I
**EE** **Electrical Engineering** 1

**CNLE670** 8700 Internship
**CNL** **Counseling** 3

**TH2450** 4450 Acting IV
**TH** **Theatre** 3

**SLU5500** 5520 Ed Interg. Sign to Eng
**SLI** **Sign Language Interpreting** 3

**STTS420** 4240 Predl. Statistic for Educators
**STT** **Statistics** 3

**EES5430** 4350 Diagnosis of Sick Solids
**EES** **Environmental & Earth Sciences** 4

**EDS695** 6955 Practi/Practicum
**EDS** **Education - Special Education** 1

**EDT2420** 2430 Non-Western Art
**ART** **Art** 3

**CLS1800** 1800 Intro Classical Myth
**CLS** **Classics** 3

**FRQ410** 4130 Literature of Middle Age
**FRE** **French** 3

**EDS6800** 6800 Dsgn. & Technic in Theatre
**TH** **Theatre** 3

**ENG110** 1100 Intro to Critical Theory
**ENG** **English** 3

**LEL10** 1010 Criminal Law for Law Enf
**LEG** **Law Enforcement** 3

**HST999** 9999 Archival Preservation
**HST** **History** 3

**TML2100** 2100 Personnel Management
**TML** **Technical Management** 3

**NUR205** 5030 Health Policy & Infor
**NUR** **Nursing** 3

**ABST920** 9200 Sum/Com. Math
**ABST** **Math and Statistics** 3

**CIS5020** 5020 Writing for Com
**COM** **Communication** 3

**PCY4120** 4120 Child Ad/Adolesc/Ad
**PCY** **Psychology** 3

**EE4420** 4420 Part-Time Ppositn
**EE** **Electrical Engineering** 1

**NUR9221** 2210 Acute Adult Hlth Prob
**NUR** **Nursing** 6

**MUE5099** 5099 College Choral
**MUE** **Music** 3

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Under the supervision of a thesis committee and chair, students select a physical education program, prepare a dissertation proposal, defend a research question, complete the research, write that thesis with full documentation and deliver that before the committee.

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Not Available

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Methods, curriculum, and materials for teaching adolescent school science: emphasis on philosophy, planning and implementation, evaluation, resources and facilities, and historical and contemporary trends in science education.

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A look at the American Pragmatist tradition from Peter, James and Dewey to more recent American philosophers such as Jacques, Davidson, Putnam and Rorty.

---

Examine the organizational and managerial foundations of nonprofit organizations. Explore areas such as the nature and mission of nonprofit organizations, evaluating performance, resource development, fund raising, and managing volunteers.

---

An examination of the critical reasoning and decision making of your class. This course explores thick and embed empirical research concerning how society emerges from the interactions of individuals and how individuals conceptualize society from society.

---

Focuses on the interaction of and fundamental knowledge of 2D Deep Conditioning. Competency-based approach. Course may accommodate disabled students when appropriate.

---

A survey of 2D and 3D computer graphics and game design. Includes a written proposal for a Ph.D. topic and a oral defense of the proposal.

---

A course designed to give vocal and string music education majors a foundation in vocal and orchestra pedagogy, band teaching methodology, and resources.

---

The major principles of pattern drafting, fitting and construction of apparel. Principles of draping, flat patterning, and design development.

---

A seminar-intersession integrating language and its development across the first years of life, its biological basis, its normal and abnormal characteristics.

---

A course exploring problems and topics in the fields of Islam. Topics vary.

---

Curricular and instructional elements for PK-12 English language teachers, including: theoretical knowledge, goal setting, needs assessment, syllabus writing, lesson planning, instructional techniques, differentiated instruction, activity creation, individual/faculty assessment.

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A practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.

---

Practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.

---

Practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.

---

An introduction to computational methods for simulating scientific phenomena.

---

An introduction to the materials, techniques, concepts and practice of painting. Using acrylic paint, students will explore the fundamentals of observational drawing, tonality, color and composition.

---

A bridger, full-bridge, and push-pull power stages.

---

Communication-intensive seminar integrating language and its development across the first years of life, its biological basis, its normal and abnormal characteristics.

---

Exploration of contemporary acting texts and styles.

---

Explore problems and approaches to photography. May include cross-media and interdisciplinary studies.

---

A course exploring problems and approaches to photography. May include cross-media and interdisciplinary studies.

---

A practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.

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---

A practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.

---

An introduction to the basics of archival preservation. Topics include components of a preservation program, factors affecting preservation, archival environments, handling and care of materials, appropriate storage and display conditions, measures to prevent or deal with pest problems, and chemical and biological contaminants.

---

Essays on contemporary acting texts and styles.

---

Communication-intensive seminar integrating language and its development across the first years of life, its biological basis, its normal and abnormal characteristics.

---

A practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.

---

Communication-intensive seminar integrating language and its development across the first years of life, its biological basis, its normal and abnormal characteristics.

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A practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.

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A practical work experience in undergraduate level electrical engineering. UG IN Internship Writing course.
Spring 2023
EES4410 4410 Phy Geo Nat Hist Eol EES Earth & Environmental Sciences 2 Field trip course examining the landforms, processes, and deposits associated with Pleistocene continental glaciation, as well as subsequent post-glacial landscape modification. The course involves 1 day of fieldwork and 4-5 day-themed field trips.

Spring 2023
EES7490 7490 Modeling Sub Fluid Flow EES Earth & Environmental Sciences 3 Applications of models for simulating subsurface flow and mass transport in aquifers and estuarine reserves. The emphasis will be on developing the dimensionality, the spatial and temporal deceleration, the initial and boundary conditions, and the parameterization needed in formulating a model from field data for Department Managed Prerequisite: Graduate level EES 5090 Minimum Grade of D-

Spring 2023
CS5790 4790 CSci Special Topics CSci Community Services Development 1 Selected topics from solar system and extrasolar astronomy and astrophysics. Topics include celestial coordinate systems and mechanics, Kepler's laws, the dynamic and evolutionary aspects of planetary formation, and evolution, galactic, cosmology, and extrasolar Planets.

Spring 2023
NEU4950 4950 Sr Cap Neur Sci Art NEU Neuroscience 2 Senior Neuroscience majors will select a neuroscience topic, critically analyze the scientific literature associated with it, and write a scientific review article on the study of that topic. Integrated Writing Course.

Spring 2023
MGST280 2800 Staffing MGST Management 3 Coverage of the staffing process. Topics include human resource planning, recruitment, selection, measurement in selection, legal issues in staffing, job analysis, decision making, and retention and management.

Spring 2023
ART2280 2280 Drawing II ART Art 3 Introduces concepts and techniques of drawing. May include studies from the human figure and other natural forms. This course has a fee that is non-refundable once the term begins. Integrated Writing Course.

Spring 2023
URS1210 1210 Pub. Leadership & Change URS Urban Affairs 3 Examines the leadership roles of the public and nonprofit administrative in formulating programs, policies, and service delivery options. Topics such as managing internal and external environments, improving productivity and effectiveness, program/project creation, and the dynamics of change. This course fulfills a requirement in the Master of Urban Affairs.

Spring 2023
LREP3550 3550 LEAP Pronunciation Imp LEP LEAP 2 The course provides high-intermediate to advanced non-native English speakers with the tools they need to improve their intelligibility when speaking English. The focus of this course will be on the most important aspects of North American English pronunciation. Topics include the vowel and consonant sounds of NAE, the rhythmic and musical aspects such as syllable stress and intonation, and how to use the voice and articulation to improve accuracy of speech production.

Spring 2023
NUR1441 4411 Crit. Reason Crit. Hlth Care NUR Nursing 1 Focuses on critical reasoning and nursing care of study individuals with selected complex health stressors across the lifespan. Incorporates delivery of holistic, patient-centered care using concepts from previous courses in critical care situations.

Spring 2023
SWR640 6400 SW Field Ed Seminar I SW Social Work 3 Social Work 3 Designed to integrate Field Education I experience and coursework. Offered concurrently with foundation fieldwork.

Spring 2023
THF450 4500 Acning I TH Theatre 3 Exploration of acting through the lens of characters in more demanding scenes from established scripts; using script analysis as the foundation for acting work. This course has a fee that is non-refundable once the term begins. Integrated Writing Course.

Spring 2023
ART1510 1510 Art Theory and Criticism ART Art 3 Historical surveys and intensive studies in art theory and criticism. This course has a fee that is non-refundable once the term begins. Integrated Writing Course.

Spring 2023
NUR1110 1110 Nanotechnology NUR Nursing 1 Nanotechnology is an interdisciplinary field that encompasses aspects of biology, chemistry, and physics. This course will focus on three themes: the development and characterization of NPs, their potential applications in medicine/cellular applications, and their potential toxicological risks to human health.

Spring 2023
EES6550 6550 Aquaeus Env Geoch Gophys EES Earth & Environmental Sciences 3 Study of the interactions between natural fresh water and their geologic environments. Included topics are chemical equilibrium concept, modeling using PHREEQC, carbonate system, water-rock interaction, solute solubilities, redox reactions, biological influences on aquaeus geochmistry, and applications of environmental isotope models. Independent term project required. 3.0 Credit hours.

Spring 2023
SOC3030 3030 Int'l Migratn & Hegnmg SOC Sociology 3 Introduction to the dynamics of international migration and immigration, migrant adaptation and incorporation, and the U.S. response to immigration.

Spring 2023
PSY2670 2670 Psychology of Aging Cap PSY Psychology 3 Communication-intensive seminar integrating knowledge on theories, methods, and research related to human aging. Focuses on both current research and applications from psychology.

Spring 2023
PSY5990 5990 Integrative Psych PSY Professional Psychology 3 The course covers the entire field of integrative psychology. The course will expose students to current perspectives on psychotherapy theory and the integration of the movement. Students will also have the opportunity to examine and apply a variety of strategies for integration, as well as examine issues and challenges to developing an integrative stance.

Spring 2023
MP3350 3350 Scenwriting Short Film MP Motion Picture 3 Introduction to writing a short screenplay. Students will learn basic storytelling strategies for media production.

Spring 2023
ENG3240 3240 Post-Colonial Tests ENG English 3 Continental European and non-European post-colonial测试.

Spring 2023
CS2940 2940 Comp Lab II CS Computer Science 3 Computer Science II.

Spring 2023
CS1130 1130 Computer Science I CS Computer Science 4 Basic concepts of programming and programming languages. Structural programming, stepwise refinement, and object-oriented development. Integrated Writing course for Department Prerequisite: WGU Math Placement 40 or Undergraduate level MTH 1200 Minimum Grade of D-

Spring 2023
SOQ4500 4500 Qualitative Methods SOC Sociology 4 Provides students with an appreciation of a variety of qualitative research techniques including interviews, focus groups, case studies, and observational research.

Spring 2023
INT2050 2050 Intermediate Italian ITAL Italian 3 Continual study of the Italian language. Grammar review; reading, and discussion of selected texts, with practice in speaking and writing the language.

Spring 2023
LE1130 1130 Police Academy 4 LE Law Enforcement 3 Ohio Police Training Academy curriculum. Basic policing problems and procedures. Advanced human relations in special events; stressful situations; interpersonal relations and law enforcement.

Spring 2023
URS4940 4940 Issues in Metro Dev. URS Urban Affairs 3 Explores issues that impact metropolitan development as well as the impact of development. Topics include pollution, international development, housing and transportation.

Spring 2023
EES3200 3200 EES Colloquium EES Earth & Environmental Sciences 0.5 A weekly seminar in which research scientists from within and from outside the Department of Earth and Environmental Sciences present their research. Class normally meets once a week for a half hour.

Spring 2023
EDL9000 9000 Comm Relation & Process EDL Educational Leadership 3 The course examines relationships between schools and communities from demographic, political, and market perspectives. The course focuses on school and community role in delivering educational programs and services responsive to local needs.

Spring 2023
PSW990 9900 Select Topics PSY Professional Psychology 1 Supervised individual research on selected topics arranged between student and faculty member for Department Managed Prerequisite: Graduate level WGS 7000 Minimum Grade of D- or Undergraduate level WGS 7140 Minimum Grade of D- or Millersville level WGS 7140 Minimum Grade of D-.

Spring 2023
SCM710 7100 Special Studies in SCM SCM Supply Chain Management 1 Intensive reading or research in a selected field of supply chain management. Individualized instruction with varying topics.

Spring 2023
RHB7110 7110 Voc. Eval & Assessment RHB Voc Ed 1 Voc. Eval & Assessment RHB Voc Ed 1

Spring 2023
PSY2700 2700 Adv. Topics in Psychology PSY Psychology 3 Communication-intensive seminar integrating knowledge on personality, intelligence, and psychological disorders. Topics will vary by term. This course has a fee that is non-refundable once the term begins. Integrated Writing Course.

Spring 2023
EC280 2800 Economics of Innovation EC Economics 3 The course covers a broad range of topics from the business, economic, and social sciences literature on the creation, management, and diffusion of innovations in society. Institutions engaged in the production of goods and services and new product development in PMR, new ventures, market competition, and intellectual property laws are explored. Special emphasis is placed on how firm-specific technology and strategies to achieve goals and success, as well as the impact of innovation on society as a vehicle for Department Managed Prerequisite: Undergraduate level ECO 2400 Minimum Grade of C, Undergraduate level ECO 2500 Minimum Grade of C, and Graduate level MIB 5200 Minimum Grade of D-

Spring 2023
COM5710 5710 Topics in Comm COM Communication 4 Special topics in the various areas of speech communication.

Spring 2023
PSY3230 3230 Psy Issues in Aging PSY Psychology 3 Psychology of Aging Cap.

Spring 2023
CIS5710 5710 Intro to General Accounting CIS Business 4 Introduction to the key concepts of accounting with emphasis on the financial statements and their interpretation.

Spring 2023
MKT3400 3400 Integrated Marketing Comm MKT Marketing 3 Introduction to integrated marketing communications including advertising, direct marketing, public relations and sales promotion. Includes discussion of creative and media strategies.

Spring 2023
EE3320 3320 Digital System Design EE Electrical Engineering 4 Basics of digital computer hardware and design. Topics include switching algebra and switching functions, logic design of combinational and sequential circuits, storage elements, register-organized computer.

Spring 2023
CIS1020 1020 Professional Dev CIS Office Information Systems 1 Professional development in office procedures, dress, personality, leadership, and other aspects of business etiquette.

Spring 2023
APLS410 4100 APLS Legal Issues APAP Applied Studies 3 A course to provide opportunities for students to gain knowledge, practice, and study in legal issues of applied business operations. Focus on fundamentals such as the legal systems, tort law, negligence, liability, contracts, insurance, and labor law, etc. as they apply to business and organizational settings.

Spring 2023
PSY4600 4600 Partial Differential Eq MTH Mathematics 3 Linear first order equations, method of characteristics. Classification of second order equations. Solution techniques for the heat equation, wave equation and Laplace's equation. Minimum prerequisites: Green's functions and fundamental solutions (for Department Managed Prerequisite: Undergraduate level MTH 2230 Minimum Grade of D and Undergraduate level MTH 2230 Minimum Grade of D.) or Undergraduate level MTH 2250 Minimum Grade of D-

Spring 2023
MKT4300 4300 Integrated Marketing Comm MKT Marketing 3 Introduction to integrated marketing communications including advertising, direct marketing, public relations and sales promotion. Includes discussion of creative and media strategies.

Spring 2023
EES2200 2200 Intro to Geophysics EES Earth & Environmental Sciences 4 Introduction to Geophysics students learn the methods and concepts of practical exploration geophysics. We deal with the five main methods of exploration: seismic reflection, seismic refraction, gravity methods, electrical methods, and magnetic methods. The lectures are put into practice during Saturday field work in the vicinity of the campus to characterize the near surface.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRTX8001</td>
<td>Lab Safety</td>
<td>Exploration of politics, economy, society, and international relations of developing nations.</td>
</tr>
<tr>
<td>PTX1200</td>
<td>Pharmacology</td>
<td>This course covers the fundamentals of pharmacology and toxicology.</td>
</tr>
<tr>
<td>LEP0350</td>
<td>Listening</td>
<td>Listening, speaking and pronunciation for high-intermediate ESL students.</td>
</tr>
<tr>
<td>ENG3570</td>
<td>Digital Communication Lab</td>
<td>Advanced practice in writing and revising fiction, refining craft and style, with the aim of producing fiction of superior merit; group discussion of manuscripts, and reading and discussing of contemporary fiction. Integrated Writing course.</td>
</tr>
<tr>
<td>BIO2550</td>
<td>Basic Cell Culture Tech Lab</td>
<td>Basic Cell Culture Technology.</td>
</tr>
<tr>
<td>ENG2100</td>
<td>Writing</td>
<td>Methods of scholarly investigation in music history, musicology, and music education; exploring the historical and social implications of music.</td>
</tr>
<tr>
<td>ENG7200</td>
<td>Topics in Music</td>
<td>Integration, and series and residues. Integrated Writing course.</td>
</tr>
<tr>
<td>ENG7300</td>
<td>Topics in Literature</td>
<td>Topics include poetry, drama, and fiction; study of literary movements, critical theory, and the historical and social contexts of literature.</td>
</tr>
<tr>
<td>MTH2320</td>
<td>Linear Algebra</td>
<td>Introduction to the theory and pedagogy of research writing and argumentation and the teaching of ENG 2100. Requires concurrent teaching or tutorial experience.</td>
</tr>
<tr>
<td>ENG3220</td>
<td>Research Methods</td>
<td>Methods of scholarly investigation in music history, musicology, and music education; exploring the historical and social implications of music.</td>
</tr>
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<td>ENG3570</td>
<td>Digital Communication Lab</td>
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</tr>
</tbody>
</table>
Spring 2023

**POLS6100** 6100

**5560** 5560

**PSY7260** 7260

**SOCI6120** 6120 Sociology 3

Examines the period following the decline of the Roman Empire to ca. 1450. Topics vary and can include European, Islamic, and Byzantine civilizations. Integrated Writing course.

**EES4400** 4400

**3440** 3440

**Electronics Mechatronics** 3

Thesis and applications of linear integrated circuits. Topics include bipolar and field effect transistor analysis and design, multi-stage and feedback amplifiers, ideal and real operational amplifiers, frequency response and compensation, active filters, comparators, and waveform generators.

**EE6220** 6220

**Psychometrics** 2

A study of major issues such as sense and reference, theories of meaning and truth, and reference and meaning in philosophy. Focus on graduate students.

**IT2150** 2150

**2150 Information Technology** 4

Skills needed to integrate essential software into projects that conform to design principles and client expectations.

**SL2000** 2000

**3000** 3000

**Interpreter Proficiency** 3

Preparation for practicum - reading and discussing current events and topics within the field, development of professional portfolio, resume, work sample, practicum goals and planning with 30 hour field based practicum experience and observations and expert support.

**ESDS4900** 4900

**Education - Special Education** 4

Use assessment data to plan and implement remediation in a school setting. Write professional case study integrating assessment and tutoring data. Include a minimum of 24 hours in a P-12 school setting.

**BIOS3550** 3550

**5550** 5550

**5550** 5550

**Diversity of vascular plant species with an emphasis on angiosperms, phylogenetic relationships and methods, terminology pertinent to taxonomic classification and nomenclature.**

**IT5130** 5130

**3130 Computer Animation** 3

Numerical and statistical analysis of visual effects, graphics, and animation. Use digital software to create realistic computer-generated imagery.

**EE6550** 6550

**5550** 5550

**5550** 5550

**Medical Image Processing** 3

Appropriate method/model to apply to each data set. Students use expert-system software on each project to determine image processing algorithms that are most appropriate for each data type.

**CIS6560** 6560

**5600** 5600

**5600** 5600

**Medical Image Processing** 3

Appropriate method/model to apply to each data set. Students use expert-system software on each project to determine image processing algorithms that are most appropriate for each data type.

**PSY6350** 6350

**3500** 3500

**Psychology** 3

Communication-intensive senior integrating knowledge on theories, methods, and research related to human aging. Focus on both current research and applications from psychology, integrated with other disciplines.

**IS6150** 6150

**5150** 5150

**IS 5150** 5150

**5150** 5150

**Industrial and Human Factor Psychology** 3

Topics in probability and statistics with an emphasis on existing engineering problems. Following this course, students will be able to analyze data, design and analyze statistically valid experiments, and draw statistically valid conclusions. Topics include probability and statistics, sampling distributions, hypothesis testing, regression analysis, correlation, analysis of variance (ANOVA), model selection, statistical curet application, and computer software for basic statistical analysis.

**PSY7470** 7470

**4700** 4700

**Psychology** 3

Computational models of brain structure and function. Interpretation of brain imaging data and computational models of brain function.

**PSY6410** 6410

**4100** 4100

**4100** 4100

**Psychometric** 2

Basic concepts of classical test theory, reliability, and validity. Students will learn to interpret and design psychometric and behavioral assessments.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
<th>Credits</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>NUR7520</td>
<td>Psych Cr to Age 2 Form II</td>
<td>Nursing</td>
<td>2</td>
<td>GR Lecture</td>
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<tr>
<td>EC5000</td>
<td>Global Econ Basic Course</td>
<td>Economics</td>
<td>3</td>
<td>UE Lecture</td>
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<tr>
<td>SW6740</td>
<td>Child Welfare II</td>
<td>SW Social Work</td>
<td>3</td>
<td>GR Lecture</td>
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<tr>
<td>SW7370</td>
<td>Hum Behav Soc Env-Macro</td>
<td>SW Social Work</td>
<td>3</td>
<td>GR Lecture</td>
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<tr>
<td>SR7600</td>
<td>Pathogenic Mechanisms</td>
<td>Microbiology &amp; Immunology</td>
<td>4</td>
<td>GR Lecture</td>
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<tr>
<td>KHI100B</td>
<td>Backpacking</td>
<td>Knowledge &amp; Health Sciences</td>
<td>1</td>
<td>UB Lab</td>
</tr>
<tr>
<td>BMS3141</td>
<td>Intro for Radiation Ideas</td>
<td>BMS Biomedical Sciences</td>
<td>3</td>
<td>UB Lecture Combination</td>
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<tr>
<td>NE7175</td>
<td>Adv Man Photos</td>
<td>ME Mechanical and Materials Engr</td>
<td>3</td>
<td>UB Lab</td>
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<tr>
<td>SW5400</td>
<td>Conc Focus Fam Policy</td>
<td>SW Social Work</td>
<td>3</td>
<td>GR Lecture</td>
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<tr>
<td>ITA4200</td>
<td>Beginning Italian II</td>
<td>ITA Italian</td>
<td>10</td>
<td>GR Lecture</td>
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<tr>
<td>AU1200</td>
<td>Intro to Aviation</td>
<td>AU Aviation</td>
<td>20</td>
<td>GR Lecture</td>
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<tr>
<td>LBL411</td>
<td>Heredity Lab</td>
<td>MSU Medical Science</td>
<td>0.5</td>
<td>GR Lecture</td>
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<tr>
<td>AVI2000</td>
<td>Franco-American Films</td>
<td>FR French</td>
<td>8</td>
<td>GR Lecture</td>
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<tr>
<td>COM6330</td>
<td>Persuasion &amp; Rhet Theory</td>
<td>COM Communication</td>
<td>3.33</td>
<td>GR Lecture</td>
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<tr>
<td>REL5450</td>
<td>Asian Rel and Ecology</td>
<td>REL Religion</td>
<td>5.54</td>
<td>GR Lecture</td>
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<tr>
<td>BBA115L</td>
<td>Organisms &amp; Ecosystem Lab</td>
<td>BBA Biology</td>
<td>1.15</td>
<td>GR Lecture</td>
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<tr>
<td>BDD3101</td>
<td>Evolution and Ecology</td>
<td>BIO Biology</td>
<td>2.10</td>
<td>GR Lecture</td>
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<tr>
<td>SPN6100</td>
<td>Ind Resel Grad Studies</td>
<td>SPN Spanish</td>
<td>6.16</td>
<td>GR Lecture</td>
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<tr>
<td>PHY2400R</td>
<td>General Physics I Radiation</td>
<td>PHY Physics</td>
<td>2.40</td>
<td>GR Lecture</td>
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<tr>
<td>SOC3110</td>
<td>Sociology of Religion</td>
<td>SOC Sociology</td>
<td>3.11</td>
<td>GR Lecture</td>
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<tr>
<td>IHE2072</td>
<td>Systems Engineering &amp; Analysis</td>
<td>IHE Industrial &amp; Hum Fac Engr</td>
<td>7.20</td>
<td>GR Lecture</td>
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<tr>
<td>ME1200</td>
<td>Eng Prog with Matlab</td>
<td>ME Mechanical and Materials Engr</td>
<td>10.20</td>
<td>GR Lecture</td>
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<tr>
<td>ART3010</td>
<td>Independent Study in Art</td>
<td>ART Art</td>
<td>3.10</td>
<td>GR Lecture</td>
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<tr>
<td>HIST110</td>
<td>Research Seminar</td>
<td>HIST History</td>
<td>6.83</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>EE2360</td>
<td>Random Signs and Noise</td>
<td>EE Electrical Engineering</td>
<td>3.26</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>EE2330</td>
<td>Circuit Analysis II</td>
<td>EE Electrical Engineering</td>
<td>3.30</td>
<td>GR Lecture</td>
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<tr>
<td>PTT8005</td>
<td>Med Bio Defense</td>
<td>PTT Pharmacology/Toxology</td>
<td>8.05</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>PHN4100</td>
<td>Hon Int Study in Finance</td>
<td>FIN Finance</td>
<td>4.78</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>BM3200</td>
<td>Scientific Communication</td>
<td>BMS Biochem &amp; Molecular Biology</td>
<td>3.60</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>CHA4000</td>
<td>Adv: Cross Intervention</td>
<td>CHL Counseling</td>
<td>3.98</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>PLS1690</td>
<td>Independent Research</td>
<td>PLS Political Science</td>
<td>6.91</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>EE2460</td>
<td>Reconfig Class Inc</td>
<td>EE Electrical Engineering</td>
<td>4.86</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>MTH3100</td>
<td>Modern Algebra</td>
<td>MTH Mathematics</td>
<td>4.51</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>PLS7640</td>
<td>Pot of Women &amp; Terror</td>
<td>PLS Political Science</td>
<td>3.74</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>SLJ4000</td>
<td>Legal Interprting</td>
<td>SLJ Sign Language Interprting</td>
<td>4.50</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>CSS2500</td>
<td>Comp Data Analysis</td>
<td>CSS Computer Science</td>
<td>5.25</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>SPR7513</td>
<td>Psych NH Prac II</td>
<td>NUR Nursing</td>
<td>7.15</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>ISG2700</td>
<td>Theor Found of Gait &amp; T</td>
<td>ISG Intervention Specialist</td>
<td>6.70</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>PH3410</td>
<td>Art/Phil of Art</td>
<td>PHL Philosophy</td>
<td>3.41</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>PSH3140</td>
<td>LifeSupport Development Play</td>
<td>PSH Psychological</td>
<td>4.31</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>PHY1132R</td>
<td>Principles of Physics II</td>
<td>PHY Physics</td>
<td>1.12</td>
<td>GR Lecture</td>
</tr>
<tr>
<td>BM6730</td>
<td>NHIR Sputnic</td>
<td>SBS Biochemistry &amp; Molecular Biology</td>
<td>7.60</td>
<td>GR Lecture</td>
</tr>
</tbody>
</table>
Detailed study of the dynamics and control of robotic systems and robot programming languages and systems. Material covered includes rigid-body dynamics; linear, nonlinear, adaptive, and force
procedures. Examination of a range of topics related to planning and mobile environments. Topics include housing, growth, and regulation.  GR SE Seminar

Physical, chemical, and biological tools used to remediate contamination in soils and groundwater, emphasizing practical applications. Strategies will vary. Topics will include the natural attenuation, containment techniques, pump-and-treat, and in-situ technologies. Sufficient technical detail so the student can apply basic engineering design equations.

The exam contains questions based on the fundamentals of mathematics, science, and engineering. Topics include but are not limited to the following:

- Algebra and Functions
- Trigonometry
- Analytical Geometry
- Calculus

These topics are essential for understanding the concepts in physics and engineering. Questions will be presented in a multiple-choice format, and some may require the use of graphs or diagrams. The exam is designed to assess your ability to apply mathematical principles to solve engineering and physical problems.
Biomedical Review Article

Ant-Anatomy

This course will examine curriculum, methods, and materials in the teaching of mathematics for grades 7-12. This includes lesson planning, assessment, differentiation, technology, and context for algebra and geometry courses.

General Physics

Physics

Introductory survey of mechanics for science and engineering students. Topics include the principles of operation of the various devices. Topics include vectors, kinematics, dynamics, energy, momentum, radiation, oscillations and thermodynamics. Topics may vary. UG IS Independent Study

Basic Cell Culture Tech-Biology

Biology

Eukaryotic cell culture and basic techniques used to culture eukaryotic cells. Basic cell culture laboratory setup and equipment, propagation and maintenance of cell culture lines, the introduction of new genes into cells, and cellular staining. Students will work both in groups and independently.

Independent Study

Sociology

Research project in an area of specialized interest in Sociology. Students will work both in groups and independently.

Psychology

Politics, economy, society and international relations of developing nations. Integrated Writing course.

Biology

Animal behavior, stresses, limitations, and success criteria in the design and evaluation of products.

Mathematics

Survey of the contribution of German-speaking people to world culture in art, music, science, education, philosophy, and religion. Undergraduate level GER 3100 Minimum Grade of D or Undergraduate level GER 3120 Minimum Grade of D or Undergraduate level GER 3220 Minimum Grade of D-

Biomedical Review Article

Anatomy

Survey of parasites of humans worldwide with emphasis on those that occur in North and Central America and Europe. Develops a working knowledge of the anatomy, life cycle and epidemiology of each parasite covered. Compare pathogenic and opportunistic fungal infections and the available treatments.

Tennis

Kinesiology & Health

This course covers some very basic work in the factors that cause conflict especially when dealing with managers, co-workers, employees, customers and all stakeholders in the business world and most important - providing conflict resolution methodologies for resolution. UG IS Independent Study

Physics Instrumentation

Physics

Circuit network analysis using Multisim (Olin, Johnson, Kirchoff, Thevenin, Norton). Hands-on laboratory component reinforces an understanding of biomedical electronic systems and devices using function generators, analog meters, oscilloscopes, multimeters, and signals frequencies, impulses, currents, and voltages. UG LL Lab

Applied Music

Music: Applied Music

Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.

Nursing Fundamentals I-NUR

Nursing

Develops competency at a beginning level in selected components of adult health assessment and associated psychomotor skills to promote, maintain and restore the health of the client.

Applied Math MUA Music: Ensembles

Music: Ensembles

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Advanced course in computer-aided design reinforces and augments the fundamentals of technical blueprint reading, technical sketching, mechanical drawing, computer-aided design (CAD) of parts, assemblies, and engineering drawings, modeling and prototyping, and computer-assisted analysis. Undergraduate level: GER 3100 Minimum Grade of D or Undergraduate level GER 3120 Minimum Grade of D or Undergraduate level GER 3220 Minimum Grade of D-

Biomedical Review Article

Music: Ensembles

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Intermediate Japanese I-JPN

Japanese


Applied Music

Music: Applied Music

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Intermediate Japanese I-JPN

Japanese


Applied Music

Music: Applied Music

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Intermediate Japanese I-JPN

Japanese


Applied Music

Music: Applied Music

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Intermediate Japanese I-JPN

Japanese


Applied Music

Music: Applied Music

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Intermediate Japanese I-JPN

Japanese


Applied Music

Music: Applied Music

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Intermediate Japanese I-JPN

Japanese


Applied Music

Music: Applied Music

The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.

Intermediate Japanese I-JPN

Japanese

This course explores the role of ion channels in a variety of cell types with an emphasis on both electrophysiological and biochemical methods for evaluation of channel function.

**Course Details**

**Course Code:** P&N7220

**Title:** Ion Channels

**Department:** Physiology & Neuroscience

**Credits:** 3

**Description:**
- Fundamentals of analytical dynamics from different perspectives applicable to complex systems. Strengths and weaknesses of various approaches. Techniques such as variational principles and Hamiltonian formalism that are significant in various optimization problems. (In-Department Managed Prerequisite(s): Graduate level ME 6210 Minimum Grade of C or better-
- This course expands the Early Childhood educator's understanding of the development of the young child in pre-school and early childhood education by providing opportunities for them to learn techniques for effective teaching and learning.

**Course Highlights**
- Required for all students interested in the Early Childhood education field.
- An emphasis will be placed on molecular mechanisms and critically evaluating primary literature.
- Topics vary

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** IRE7230

**Title:** Advanced Dynamics

**Department:** Aerospace Studies

**Credits:** 3

**Description:**
- Advanced dynamics from middle childhood content and methods courses.
- Grades 89-97.0

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** AVR3410

**Title:** Anthropology

**Department:** Anthropology

**Credits:** 3

**Description:**
- Surveys of various specialized aspects of biological anthropology.
- Grading is on a pass/fail basis.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** CUS2730

**Title:** Biochemistry

**Department:** Chemistry

**Credits:** 3

**Description:**
- Introductory course in biochemistry.
- A guide to the design, implementation, and control of experiments in your psychological research.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** ECE4500

**Title:** Electrical Engineering

**Department:** Electrical Engineering

**Credits:** 3

**Description:**
- Introductory course in electrical engineering.
- A guide to the design, implementation, and control of experiments in your psychological research.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** ECH2010

**Title:** English Language Arts for K-6 Teachers

**Department:** Education

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EDS2010

**Title:** Education

**Department:** Education

**Credits:** 3

**Description:**
- An emphasis will be placed on molecular mechanisms and critically evaluating primary literature.
- A n emphasis will be placed on molecular mechanisms and critically evaluating primary literature.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EDS6195

**Title:** English Language Arts for K-6 Teachers

**Department:** Education

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EDS8000

**Title:** Education

**Department:** Education

**Credits:** 3

**Description:**
- An emphasis will be placed on molecular mechanisms and critically evaluating primary literature.
- A n emphasis will be placed on molecular mechanisms and critically evaluating primary literature.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** ENB2010

**Title:** Environmental Biology

**Department:** Biology

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPIC2400

**Title:** Environmental Chemistry

**Department:** Chemistry

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPT2010

**Title:** Environmental Physics

**Department:** Physics

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPT2200

**Title:** Environmental Science

**Department:** Environmental Science

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPT2300

**Title:** Environmental Economics

**Department:** Economics

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPT2400

**Title:** Environmental Geology

**Department:** Geology

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPT2500

**Title:** Environmental Management

**Department:** Management

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPT2600

**Title:** Environmental Psychology

**Department:** Psychology

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture

**Course Code:** EPT2700

**Title:** Environmental Sociology

**Department:** Sociology

**Credits:** 3

**Description:**
- An introduction to data science, the algorithms and processes for preparing and analyzing data, generating predictions, and extracting relationships from data. Present fundamentals of decision making, data mining, and machine learning.

**Instructors:**
- UG
- LE
- Lecture
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For further information or questions, please contact the relevant department or administration.
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</table>

Note: The table above lists the Spring 2023 course codes, titles, and departments. Further details such as credit hours, prerequisites, and course descriptions are not included in this representation.
Course Codes: CHM 4530 – Instrumental Analysis, CHN 4300 – Chemistry, CMOS Mxd Sig IC Des – Introduction to contrapuntal techniques.

Character & Competence I

Any future internship experience that provides meaningful work experience to enhance technical skills and promote professional development. Students must complete in one of the fields as listed in the program model.

Minimum of 10 hours per week for each credit hour registered.

The course covers the fundamental theory of radio frequency (RF) power amplifiers and their applications in wireless communications, radars, and radio and TV broadcasting. RF power passive and active devices are discussed.

Introduction to the use, application, evaluation, and development of psychological tests and measures including ability, aptitude, attitude, standardized, or normed measures.

Describes the intricate relations between the fluid mechanics and biomedical aspects of the cardiovascular system. GR LE Lecture

Mechanical and Materials Engr

Introduction to multilevel mediation models using specialized software. Students will be able to critically examine research using multilevel modeling.

Development. Students must complete all of the 2nd year courses as listed in the program model.

Minimum of 10 hours per week for each credit hour registered.

Survey the background, theory, function, technique, and the uses of small groups in counseling.

In the American Deaf community, exploring the active devices are discussed.

Interdisciplinary view of growth and change in urban socioculture around the globe. Case studies illustrate how urbanization, technology development and the administrative state intertwine and affect urban societies around the globe.

Minimum of 10 hours per week for each credit hour registered.

The multi-faceted history of the American Deaf community, exploring the active devices are discussed.

Introduction to continuous control systems. Block diagrams and signal-flow graphs, electromechanical modeling, time response, root locus, and design of PID controllers.

Students develop interrelated programs to design a three-dimensional hierarchical model, manipulate, and view it.

Undergraduate level EE 4420L Minimum Grade of D or Graduate level GER 5120 Minimum Grade of D or Graduate level GER 5220 Minimum Grade of D

Students develop interrelated programs to design a three-dimensional hierarchical model, manipulate, and view it.

Survey the background, theory, function, technique, and the uses of small groups in counseling.

Minimum of 10 hours per week for each credit hour registered.

Survey the background, theory, function, technique, and the uses of small groups in counseling.

Introduction to continuous control systems. Block diagrams and signal-flow graphs, electromechanical modeling, time response, root locus, and design of PID controllers.

Electronics, education, healthcare, and military will be covered. The course will also provide overview at several industry practices. Students will learn to use mobile application frameworks and development environments.

Introduction to continuous control systems. Block diagrams and signal-flow graphs, electromechanical modeling, time response, root locus, and design of PID controllers.

Students develop interrelated programs to design a three-dimensional hierarchical model, manipulate, and view it.

Survey the background, theory, function, technique, and the uses of small groups in counseling.

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Survey the background, theory, function, technique, and the uses of small groups in counseling.

Introduction to continuous control systems. Block diagrams and signal-flow graphs, electromechanical modeling, time response, root locus, and design of PID controllers.

Students develop interrelated programs to design a three-dimensional hierarchical model, manipulate, and view it.

1 Independent study in Mechanical Engineering, Materials Science and Engineering, and Renewable and Clean Energy. Topics vary. 

Spring 2023

PSY4801 4941 Arami Belt-Co with Apple 5 Psychology Communication-intensive seminar: Integrating knowledge on animal behavior. Topics will include evolution, natural and sexual selection, and mating systems. Integrated Writing courses. 

Spring 2023

ACSC2090 5020 Intermediate ACCT Accountancy Financial accounting concepts applied to complex measurement problems and the preparation of financial statements. 

Spring 2023

CS21070 7070 Numerical Analysis II CS Computer Science Finite difference and finite element methods for partial differential equations, including elliptic, parabolic and hyperbolic equations. 

Spring 2023

EE22040 5040 MIC & GEN ELAB ED Education Methods for teaching 4th, 5th and 6th grade language arts to special education students and other students with special needs. 

Spring 2023


Spring 2023

MLB4260 4330 Hematology Practice MUS Medical Laboratory Science Students learn the theory and practice of computer processing of seismic reflection data. Every step in this technology is taught including seismic data formats, seismic data manipulation, filtering, 

Spring 2023

BIO3450 3450 Concepts Life Sci & Ed Educations BIO Biology Introduction to biological concepts for Elementary and Middle School Education Majors. Structured around the National and Ohio State Science Standards and taught from an inquiry perspective. 

Spring 2023

ME2660 2660 Dig Integ Oil Design Lab GE Engineering-1 Electrical Engineering 1 Exploratory, testing and evaluation of digital integrated circuits with particular emphasis on programmable logic devices. 

Spring 2023

SOC4240 4940 Gender & Sexuality SUO Sociology 

Spring 2023

EGE3250 6920 Unk YG Registration DMV DMV Consortium 0.5 

Spring 2023

PSY1870 8780 Organizational Theory PSY Psychology Seminar with in-depth coverage of organizational theory. 

Spring 2023

INF811L 671L Sim & Stoch Models Lab HIE Industrial & Human Fac. Eng 0 

Spring 2023

IHE7580 5560 Studies in Select Topics PLS Political Science 

Spring 2023

MTH2120 2210 Applied Linear Algebra MTH Mathematics The course demonstrates the power of linear algebra in the technological solutions to 21st century data-focused applications. Students will learn linear algebra concepts and their techniques and software implementations. Sample applications include computer animation, Google page rank, and image compression. Linear algebra topics will include matrix theory, linear equations, eigenvalues, orthogonalization, and the Jordan form. 

Spring 2023

ME6260 9040 MECH ANATOMY MUS Medical Laboratory Science 

Spring 2023

URS4390 4490 Leave in City/County Environ URS Urban Affairs 

Spring 2023

LSB700 2700 Univ Symphony Orch MU Music: Ensembles 

Spring 2023

SPN2070 7970 Clinical Neuropsychology PSY Professional Psychology 

Spring 2023

EC2210 2100 Education in a Democracy ED Education Explores role of education in the democratic process. 

Spring 2023

ECE4170 4170 Digital Control Sys EE Electrical Engineering 

Spring 2023

BIO4290 4290 Intro to Bio Info Tech Apps BIO Biology 

Spring 2023

NUR104 7104 Adv III: Health Promotion NUR Nursing 

Spring 2023

PSY4150 4150 Metabolic Medicine ME Mechanical and Materials Eng 

Spring 2023

KIN240 2500 University Dance MUS Music: Ensembles 

Spring 2023

MED200 2600 Metabolism ME Mechanical and Materials Eng 

Spring 2023

SIM200 3450 Intr-Diagnostic & Electromagnet MUS Medical Laboratory Science 

Spring 2023

MET220 2220 Applied Linear Algebra MTH Mathematics 

Spring 2023

BIO211L 2110 Organic Chemistry Lab II CHM Chemistry 

Spring 2023

EE6040 6040 Phonic & Word Study for Int Spec Educ ED Education 

Spring 2023

SPN2020 2020 Business Spanish SPN Spanish 

Spring 2023

DMS490 3490 Public Relations KGR German 

Spring 2023

SPE4240 4240 Lifespan & Psychological Development PSY Psychology 

Spring 2023

ISQ110 1110 Intro to Business. 52000 Business 

Spring 2023

PSY8780 8780 Pre習 Library PSY Psychology 

Spring 2023

RN2960 2960 University Band Orchestra MUE Music: Ensembles 

Spring 2023

MUE200 2000 University Dance MUS Music: Ensembles 

Spring 2023

BIO4000 4000 University Dance MUS Music: Ensembles 

Spring 2023

ET320 3200 Physical Chemistry I CHM Chemistry 

Spring 2023

NUR215 2150 Adv III: Admit Life Experiences NUR Nursing 

Spring 2023

IHE6712 6712 SIMULATION IHE Industrial & Hum Fac Eng 0 

Spring 2023

ICP3000 3000 JHE Introduction to business principles. MUE Music: Ensembles 

Spring 2023

PHS320 3200 University Dance MUS Music: Ensembles 

Spring 2023

MED300 3000 University Dance MUS Music: Ensembles 

Spring 2023

PSY190 1900 University Dance MUS Music: Ensembles 

Spring 2023

LIT120 1200 University Dance MUS Music: Ensembles 

Spring 2023
This course will provide a series of laboratory experiments similar to the state-of-the-art R&D in nanotechnology and nanoscience. The experiments include 1) nanoscale imaging and spectroscopy, 2) functionalization and nanolithography, 3) characterization of physical properties using techniques such as atomic force microscopy,拉曼光谱, differential scanning calorimetry, x-ray diffraction, and scanning electron microscopy, 4) biological applications of nanotechnology in biotechnology and medicine.

This course will provide an overview of the distinctive features of nanotechnology and their application to biomedicine. The course contrasts micro/macro/micro approaches to bring out the unique properties of nanotechnology in nanomedicine. Cutting-edge techniques for imaging and imaging drug delivery, and therapeutic applications will be addressed.

This course is designed to provide a comprehensive overview of nanotechnology and its applications in medicine. The course covers the fundamentals of nanotechnology, including the unique properties and applications of nanomaterials, such as metal nanoparticles, carbon nanotubes, and graphene nanosheets. The course also explores the potential applications of nanotechnology in fields such as drug delivery, imaging, and therapeutics.

This course focuses on the qualitative research process from research topic, design, implementation, analyses, and findings. Included is emphasis on the researcher as the research instrument and the role of qualitative data in building a theory. The course will cover qualitative research methods such as interviews, focus groups, and thematic analysis.

This course addresses the principles of computational methods and technologies to neuroergonomics and neuroengineering, including applications to healthcare: analysis and interpretation of neuroimaging and neurophysiological data, and modeling of human neural systems. The course also covers the integration of these methods with other data sources, such as external sensor data and behavioral data.

This course will provide an overview of the distinctive features of nanotechnology and their application to biomedicine. The course contrasts micro/macro/micro approaches to bring out the unique properties of nanotechnology in nanomedicine. Cutting-edge techniques for imaging and imaging drug delivery, and therapeutic applications will be addressed.

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Laboratory experiments 1) fabrication of nanomaterials; 2) characterization of physical and chemical properties; and 3) computational modeling of nanoscale physical phenomena.
Lecture/Lab Combination
Examines the issues and responsibilities of using digital technologies. Consideration of issues of intellectual property rights, ethics, managing online reputation, and professional responsibilities.

Practicum in HPR
LE

Anthro of Sex & Gender
1
Trend&Issue Agricultural Sect
4820
Fundamental metallurgy and ceramic science of powder processing techniques. Details of current powder processing technology and methods. Hands-on laboratory experience with both metal and

Lecture
4
4
REL
Advanced study in selected topics that frequently include new developments in the methodology or subject matter of the various sub fields of the discipline. Integrated Writing course.

Lecture
BIO5450
3
Lecture
APS
UG
3130
4420
Lecture/Lab Combination
LL
LE
LE
ART
MLB4820
Origin, composition, and diagenesis of ancient and modern carbonate rocks. Macroscopic and microscopic identification of rock constituents. Survey of depositional models for modern carbonate

EES
Music: Ensembles
3
EE
APS4210
5450
Lecture
LE
6880
4660
LE
LL
LE
ANT6040
1
Issues and Resp in DL
Anatomy
Lecture
EE4420
ART3130
Medical Laboratory Science
Supply Chain Management
CNL7320
Tot Qual Mgt & Lean Sup
Computer Science
Students must have completed Biomedical Review Article (ANT 6030) in order to take this course. ANT 6030 sets the foundation for what the Presentation will be focused on. Students will utilize the literature researched completed a development project that could, potentially, advance the selected biomedical field. <i>(undergraduate Department Managed Prerequisite(s): Undergraduate level ANT 6020 Minimum Grade of C or graduate level ANT 6020 Minimum Grade of C or graduate level ANT 6020 Minimum Grade of C)</i>

EGR1980 1980
Spring 2023
ACC4780 4780 Hon: Ind Study in ACC ACC Accountancy 2

CSD8030 8030
Spring 2023
BIO5460
Intro to Anthropology
ATH
Anthropology
2000
A selected area of anatomy is discussed in greater detail than in basic anatomy courses. Some topics may include laboratory. GR IS Independent Study

Spring 2023
AMT310 310
Studies Renaissance Art
ART
Art
3130
General surveys and intensive studies of the period, major movements, and artists of the time. Integrated Writing course <i>(undergraduate Department Managed Prerequisite(s): Undergraduate level ANT 2110 Minimum Grade of D or undergraduate level ANT 2110 Minimum Grade of D or graduate level ANT 2100 Minimum Grade of D)</i>

Spring 2023
ECG205L 205L
Intro Robotics Lab CEG Computer Engineering

Spring 2023
FIND200 200
Entrepreneurship Finance FIN
Finance
3280
Financing of small and medium sized businesses from the perspective of both the entrepreneur and investor. Study how the financing decisions of small and medium sized private companies differ from those of public firms. They will also need to be familiar with the valuation methods used in financial analysis to understand the financial decisions. 

Spring 2023
PSY2050 2050
Introduction to Psychology
PSY
Psychology
540
Concepts and applications of biology fomented to model implications of state and national pedagogical standards, assess specifically at preparing students for biology teaching in Grades 4-8

Spring 2023
KIN6360 6360
RAPA Def Strat: Intermed KNH Knowledge & Health
KNH
3
Rape Def Strat: Intermediate. An introduction to the major including advising, career, and purposes. The course is optional, but highly recommended for Anthropology majors and minors. 

Spring 2023
PSY5960 5960
Rape Def Strat: Interm KNH Knowledge & Health
KNH
160A
Rape Def Strat: Intermediate. Level of skills and knowledge in Rape Defense Strategies: Intermediate. Competency-based approach. Course may accommodate disabled students when appropriate.

Spring 2023
PSY5970 5970
Social Psychology PSY Psychology
3
Theories and data on social behavior will be reviewed. Topics will include attitude and attitude change, social perception, prejudice, and group decision making. Possible applications will be discussed.

Spring 2023
AHT1030 1030
Intro to Anthropology
ATH Anthropology
2000
An introduction to the major including advising, career, and purposes. The course is optional, but highly recommended for Anthropology majors and minors. 

Spring 2023
SNP1020 1020
Beginning Spanish II
SPAN Spanish
3
Communication and cultural perspectives. The course will focus on the use of the digitalliteracy, listening, reading, and writing. Taught in Spanish <i>(undergraduate Department Managed Prerequisite(s): SPAN level 1010 Minimum Grade of C or above)</i>

Spring 2023
SOC2320 2320
Social Organization SOC Sociology
3
Theories and analysis of social organization in its historical and present context. Emphasis on the interrelationship between individuals, groups, and institutions.

Spring 2023
SOC3200 3200
Social Organization SOC Sociology
3
Theories and analysis of social organization in its historical and present context. Emphasis on the interrelationship between individuals, groups, and institutions.

Spring 2023
EE4420 4420
Microwave Engn EE Electrical Engineering
3
Transmission line theory and application, wave propagation in rectangular waveguides, microwave network analysis, matching network, design of microstrip and resonator, and introduction of electromagnetic compatibility.

Spring 2023
CSD3030 3030
CSD/Immunology Services Development
CSD
1
Individual supervised learning experience and on-site seminars under the direction of instructor and site staff <i>(undergraduate Department Managed Prerequisite(s): undergraduate level CDS 2570 Minimum Grade of D or graduate level CDS 2570 Minimum Grade of D)</i>
Fundamental skills and knowledge of Zurich. Competency-based approach. Course may accommodate disabled students when appropriate.

Analyse video addressing DNA profiling. Promotes critical thinking about science associated with forensic DNA profiling, particularly in criminal cases where DNA evidence plays an important role. Integrated writing course.

Explores problems and approaches to drawing and includes cross-media and interdisciplinary studies. Topics vary. 

Currently offered for a variety of content areas. UG LB Lab

Intermediate level of skills and knowledge in GRACIE Self Defense: Intermediate. Competency-based approach. Course may accommodate disabled students when appropriate.

Introduction to microscopic and macroscopic physical systems developed from concepts of statistical physics. Application to classical and quantum systems will be presented as well as theories of dynamics, cross-cultural issues, historical developments, and current trends.

Survey of the American criminal justice system concentrating on political aspects. Topics include police, judges, attorneys, supreme court decisions, crime, and public opinion.

Introduction to the literature, history, and religion of early Christianity. 

Programs on video addressing DNA profiling. Promotes critical thinking about science associated with forensic DNA profiling, particularly in criminal cases where DNA evidence plays an important role. Integrated writing course.

Implementation and evaluation of action research project.

Provides experience in school leadership and administration at the district level. Candidates perform administrative tasks under the supervision of a licensed school district administrator.

Anatomy

Students will independently create the document, with input from a faculty mentor who will guide the development of the outline and provide feedback on drafts of the individual sections. The final document will be a comprehensive, polished piece of writing that demonstrates the student's ability to think critically, communicate effectively, and apply knowledge to a practical context.

Several seminars meet once a week. Guest lecturers from high-tech companies provide insight on entrepreneurship and innovation. Students gain an understanding of the associated challenges, as well as the resources available within the community.

Intermediate level of skills and knowledge in GRACIE Self Defense: Intermediate. Competency-based approach. Course may accommodate disabled students when appropriate.

Students must independently create the document, with input from a faculty mentor who will guide the development of the outline and provide feedback on drafts of the individual sections. The final document will be a comprehensive, polished piece of writing that demonstrates the student's ability to think critically, communicate effectively, and apply knowledge to a practical context.

Forces and Mechanisms of Continents: The Role of Plate Tectonics

Explores the role of the Supreme Court in American politics, including an examination of how the Court operates as a source of institutional power and public policy. Integrated writing course.

Introduction to young adult literature including major authors and illustrators. Selecting materials in different formats such as multimedia, e-books, and reference databases.

Introduction to the anthropolical study of religions of the world and how they relate to other domains of human cultural existence. Examples of contemporary nonwestern religions and other world religions. Integrated writing course.

Intermediate level of skills and knowledge in GRACIE Self Defense: Intermediate. Competency-based approach. Course may accommodate disabled students when appropriate.

Anatomy

Students will independently create the document, with input from a faculty mentor who will guide the development of the outline and provide feedback on drafts of the individual sections. The final document will be a comprehensive, polished piece of writing that demonstrates the student's ability to think critically, communicate effectively, and apply knowledge to a practical context.

Intrvntn Spec Method Mild/Mod EDS Education - Special Education

Introduction to the literature, history, and religion of early Christianity. 

Elective course for a variety of content areas UG LB Lab

Introduction to the literature, history, and religion of early Christianity. 

Intermediate level of skills and knowledge in GRACIE Self Defense: Intermediate. Competency-based approach. Course may accommodate disabled students when appropriate.

Introduction to the literature, history, and religion of early Christianity. 

Intermediate level of skills and knowledge in GRACIE Self Defense: Intermediate. Competency-based approach. Course may accommodate disabled students when appropriate.

Implementation and evaluation of action research project.

Intermediate level of skills and knowledge in GRACIE Self Defense: Intermediate. Competency-based approach. Course may accommodate disabled students when appropriate.

Students will independently create the document, with input from a faculty mentor who will guide the development of the outline and provide feedback on drafts of the individual sections. The final document will be a comprehensive, polished piece of writing that demonstrates the student's ability to think critically, communicate effectively, and apply knowledge to a practical context.

Implementation and evaluation of action research project.

Implementation and evaluation of action research project.
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>URS</td>
<td>Cities and Technology</td>
<td>URB</td>
<td>English 101: Introduction to Urban Systems. Focuses on the social, economic, and environmental challenges faced by urban areas. Analysis of urban development and planning.</td>
</tr>
<tr>
<td>EE</td>
<td>Wireless Comm Lab</td>
<td>EE</td>
<td>Elementary Education 101: An introduction to contemporary communication systems and technologies. Focus on wireless communication, including cellular networks and wireless devices.</td>
</tr>
<tr>
<td>REL</td>
<td>Modern Jewish Thought</td>
<td>REL</td>
<td>Core course on the history and culture of modern Jewish thought. Focus on the development of Jewish thought from the late 19th century to the present day.</td>
</tr>
<tr>
<td>SPM</td>
<td>703.04 Medical Decision Making</td>
<td>SOM Education</td>
<td>Medical Decision Making: An introduction to the principles and practice of medical decision making. Focus on the role of the physician in the decision-making process.</td>
</tr>
<tr>
<td>BMC</td>
<td>Biomedical Safety</td>
<td>BMS</td>
<td>Biomedical Safety: An introduction to the principles of biomedicine. Focus on the role of the physician in the decision-making process.</td>
</tr>
<tr>
<td>MUS</td>
<td>2020 Music Fundamentals</td>
<td>MUS</td>
<td>Music Fundamentals: An introduction to the principles of music theory. Focus on the role of the musician in the decision-making process.</td>
</tr>
<tr>
<td>ENG</td>
<td>English Literature and Composition</td>
<td>ENGL</td>
<td>English Literature and Composition: An introduction to the principles of literature and composition. Focus on the role of the writer in the decision-making process.</td>
</tr>
<tr>
<td>LE</td>
<td>Lecture/Study Combination</td>
<td>LE</td>
<td>Study of literature and composition. Focus on the role of the writer in the decision-making process.</td>
</tr>
<tr>
<td>IS</td>
<td>Independent Study in a selected area of special education</td>
<td>IS</td>
<td>Independent Study in a selected area of special education. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>NW</td>
<td>Human Environments</td>
<td>NWC</td>
<td>Study of human-environment systems. Focus on the role of the engineer in the decision-making process.</td>
</tr>
<tr>
<td>PS</td>
<td>Digital Design with HDL</td>
<td>PS</td>
<td>Introduction to digital design with HDL. Focus on the role of the engineer in the decision-making process.</td>
</tr>
<tr>
<td>PHY</td>
<td>Intro to Physics</td>
<td>PHY</td>
<td>Fundamentals of physics. Focus on the role of the physicist in the decision-making process.</td>
</tr>
<tr>
<td>PHY</td>
<td>Physics</td>
<td>PHY</td>
<td>Study of physics. Focus on the role of the physicist in the decision-making process.</td>
</tr>
<tr>
<td>IHE</td>
<td>Intro to Horticulture</td>
<td>IHE</td>
<td>Food and Agricultural Systems: An introduction to the principles of food systems. Focus on the role of the farmer in the decision-making process.</td>
</tr>
<tr>
<td>IE</td>
<td>Industrial Engineering</td>
<td>IE</td>
<td>Study of industrial engineering. Focus on the role of the engineer in the decision-making process.</td>
</tr>
<tr>
<td>RHE</td>
<td>Nutritional Counseling</td>
<td>RHE</td>
<td>Development of nutritional counseling. Focus on the role of the nutritionist in the decision-making process.</td>
</tr>
<tr>
<td>ED</td>
<td>Content Literacy A-12</td>
<td>ED</td>
<td>Exploration of content area learning with an emphasis on effective literacy strategies including: vocabulary/concept development, comprehension, writing, and assessment.</td>
</tr>
<tr>
<td>WSC</td>
<td>Writing Skills</td>
<td>WSC</td>
<td>Comprehensive study of writing skills, including reading, note-taking, listening, speaking, reading, and writing. Focus on the role of the writer in the decision-making process.</td>
</tr>
<tr>
<td>MTH</td>
<td>Intro to Pharmacology</td>
<td>MTH</td>
<td>Study of pharmacology. Focus on the role of the pharmacologist in the decision-making process.</td>
</tr>
<tr>
<td>BI</td>
<td>Bio-design Experiments</td>
<td>BI</td>
<td>Development of advanced cholal and viral skills. Focus on the role of the biologist in the decision-making process.</td>
</tr>
<tr>
<td>CHE</td>
<td>Intro to Computer Engineering</td>
<td>CHE</td>
<td>Center on the effective implementation of the co-teaching model. Focus on the role of the computer engineer in the decision-making process.</td>
</tr>
<tr>
<td>BIO</td>
<td>Biomedical Sciences</td>
<td>BIO</td>
<td>Study of biomedical sciences. Focus on the role of the biologist in the decision-making process.</td>
</tr>
<tr>
<td>IHE</td>
<td>Intro to Economics</td>
<td>IHE</td>
<td>Development of economic skills. Focus on the role of the economist in the decision-making process.</td>
</tr>
<tr>
<td>ATH</td>
<td>Anthropology</td>
<td>ATH</td>
<td>Political Anthropology: An introduction to the principles of political anthropology. Focus on the role of the anthropologist in the decision-making process.</td>
</tr>
<tr>
<td>ATH</td>
<td>Anthropology</td>
<td>ATH</td>
<td>Archaeological Anthropology: An introduction to the principles of archaeological anthropology. Focus on the role of the anthropologist in the decision-making process.</td>
</tr>
<tr>
<td>GSC</td>
<td>Food and Agricultural Systems</td>
<td>GSC</td>
<td>Global Studies Systems: An introduction to the principles of global studies systems. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>GED</td>
<td>Geo 2100 Geography</td>
<td>GED</td>
<td>Geography: An introduction to historical geography, the study of human-environment systems, and human environments. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>EED</td>
<td>Educational Research and Development</td>
<td>EED</td>
<td>Educational Research and Development: An introduction to the principles of educational research and development. Focus on the role of the educator in the decision-making process.</td>
</tr>
<tr>
<td>WWC</td>
<td>Wenner-Gren Institute</td>
<td>WWC</td>
<td>Study of Wenner-Gren Institute. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>EAD</td>
<td>Digital Design with HDL</td>
<td>EAD</td>
<td>Digital Design with HDL: An introduction to digital design with HDL. Focus on the role of the engineer in the decision-making process.</td>
</tr>
<tr>
<td>PSY</td>
<td>Intro to Psychology</td>
<td>PSY</td>
<td>Study of introductory psychology. Focus on the role of the psychologist in the decision-making process.</td>
</tr>
<tr>
<td>CHI</td>
<td>Chinese Conversation</td>
<td>CHI</td>
<td>Study of Chinese conversation. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>PTX</td>
<td>Pharmaceutical Toxicology</td>
<td>PTX</td>
<td>Study of pharmaceutical toxicology. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>PK</td>
<td>PAT 6000 Fundamentals of Arnis Training</td>
<td>PK</td>
<td>Study of Fundamentals of Arnis Training. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>PL</td>
<td>Paleoclimatology</td>
<td>PL</td>
<td>Study of Paleoclimatology. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>CES</td>
<td>Digital Engineering</td>
<td>CES</td>
<td>Study of digital engineering. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>RST</td>
<td>Regional Studies</td>
<td>RST</td>
<td>Study of Regional Studies: An introduction to the principles of regional studies systems. Focus on the role of the student in the decision-making process.</td>
</tr>
<tr>
<td>MTH</td>
<td>Mathematics</td>
<td>MTH</td>
<td>Study of mathematics. Focus on the role of the student in the decision-making process.</td>
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<tr>
<td>MTH</td>
<td>Biomedical Systems</td>
<td>MTH</td>
<td>Study of Biomedical systems. Focus on the role of the student in the decision-making process.</td>
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<tr>
<td>MTH</td>
<td>Biomedical Sciences</td>
<td>MTH</td>
<td>Study of Biomedical sciences. Focus on the role of the student in the decision-making process.</td>
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<tr>
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</tr>
<tr>
<td>MTH</td>
<td>Biomedical Optics</td>
<td>MTH</td>
<td>Study of Biomedical Optics: Principles and applications of light propagation in biological tissues, optical imaging contrasts, lightmodulated materials in tissue imaging, optical coherence tomography.</td>
</tr>
</tbody>
</table>
Overview of the financial management function in health care organizations. Topics include budgeting, control, capital expenditure analysis, and rate settings.

3. Communication introduce to a wide variety of diseases and associated therapies. The disease process, inflammation and healing, immunity, infection, Discussion of blood, cardiovascular, digestive, urinary, nervous, endocrine, and musculoskeletal diseases. Case studies accompany each topic area.

2. Comparative communication into the Spanish language and Hispanic cultures. Study of the Spanish language, practice in speaking, listening, reading, and writing. Taught in Spanish.

1. Overview of mathematical topics from a perspective appropriate for early and middle childhood educators. Topics include ratio and proportion, simple probability, data analysis, measurement, area, volume, and basic transformational geometry.

6. Practicum in Applied Psychology

5. Introduction to the content knowledge of the structure of literary and reading instruction. Candidate explore instructional strategies for reading and writing and the theory that supports scientifically based instruction.

4. Adv Pract SPN Conv and Writing

3. Conversational and writing techniques and grammar review; literary and/or film and/or media analysis incorporating targeted grammar, vocabulary, and stylistic devices. Taught in Spanish.

2. Speech and Writing SPN Conv

1. Supervised work in an applied psychological setting consistent with students’ individual interests (e.g., mental health agency, industrial, or organizational setting). Graduat pre-service/industry.

Graduate perspectives of urban development. Topics vary from current issues to advances in theory and methods.

Surveys of theory, research, and methodological issues in the study of development across the lifespan.

Ethical dilemmas and develops skills in identifying and resolving ethical dilemmas in professional psychology.

Hands-on experience with CAD Trade, simulation of PFGA’s and hardware description languages in a laboratory environment.

Introduction to AI and database systems, including conceptual and logical database design, relational database model, and introductory database systems design.

The course presents the stretch reflex as an example of a neural circuit and how it mediates movement. Discussion of the neuronal components that form the stretch reflex circuit and how electrical signals are generated in this circuit using tools from membrane physiology, electrophysiology, and behavioral studies.
Integrates the Field of Education & experiences and coursework. Offered concurrently with advanced general education and competency.

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Spring 2023: MS6900 5960 Studies in Selected Subj. ML Modern Languages 1
Spring 2023: LAT2010 2010 Intermediate Latin LAT Latin 3
Spring 2023: NUR2427 3421 Child, Rnoling: Indwbg & RR NUR Nursing 1
Spring 2023: DAG5500 5510 DAG5500 Registration DAG 0.5
Spring 2023: EEE420L 420L Dig Intrj/Opl Desgn Lab EE Electrical Engineering 1
Spring 2023: NE2500 6550 Geothermal Energy ME Mechanical and Materials Engr 3
Spring 2023: EEE3400 4510 Scientific Communication EES Environmental & Earth Science 3
Spring 2023: MTH1440 1440 Math Modern World w/Alg MTH Mathematics 4
Spring 2023: KIN1520 1520 Winter Camping KINI Kinology & Health 1
Spring 2023: ESE4270 4270 Process Geomorphology EES Environmental & Earth Science 3
Spring 2023: BNM6850 6850 Bio Sp Physics & Engineering BME Biomedical Engineering 3
Spring 2023: CIL2210 2210 Crisis Counseling CHL Counseling 1
Spring 2023: PPH3110 3110 Public Health Research PRY Public Health & Public Health 1
Spring 2023: ME421L 421L Industrial Controls Lab ME Mechanical and Materials Engr 1
Spring 2023: DLY3420 3420 Trend Instruction Design & Tech ED Instruction & Learning 3
Spring 2023: ENGI100 1100 Acct. Writing & Reading ENG English 3
Spring 2023: SLA4800 4800 Specialized Interplay II SLI Sign Language Interpreting 1
Spring 2023: NUR2826 2826 Jazz Band MUE Music: Ensembles 1
Spring 2023: TSE3650 3650 Tech Writing: Theory & Practice IT Information Technology 1
Spring 2023: EDH4100 4100 Ed Hersons Project II ED Education 1
Spring 2023: THD3270 3270 Acting/Musical Theatre I TH Theatre 1
Spring 2023: MTH5510 5510 Algebra II MTH Mathematics 3
Spring 2023: PLS4490 4490 Intl Pol Gender Violence PLS Political Science 3
Spring 2023: PSY2420 2420 Game Theory Cup Psy PSY Psychology 3
Spring 2023: PHL3140 3140 Theories of Knowledge PHL Philosophy 3
Spring 2023: SAA750 750 Design Diverse Learn Exp SSA Student Affairs in Higher Ed 3
Spring 2023: PSY6130 6130 Psy in Film Cup PSY Psychology 3

Students focus on critical reasoning and the care of individuals and groups with common mental health disorders. Emphasizes therapeutic use of self for enhancing effective communication. Incorporates principles from abnormal psychology, group dynamics, milieu nursing, and common care relationships, substance use/abuse, crisis intervention, disability evaluation.

Review of literature and reading presentation. Major emphasis on major research articles, critical thinking and problem solving.

A project-oriented design course integrating design methodology with the principles of major electrical engineering disciplines. Project planning and management, design specifications, electrical engineering, testing and evaluation, electronic documentation, working and written technical reports. Integrated Writing course.

An in-depth independent study, under the guidance of a TED faculty advisor, in which students pursuing Education Departmental Honors present their completed Honors projects. Specialized courses in genres, modes, styles, practices, creative processes, and the craft of fiction, creative non-fiction, poetry, or playwriting. Integrated Writing course.

Process geology and what they reveal of past geologic processes and climate. Incorporates selected topics in algae for underpreparted students.

The influence and characteristics of the geothermal resource will be studied. An overview of the broad range of techniques used for tapping the energy of the earth will be discussed. Detailed analysis of techniques for applying cold and hot geothermal energy will be implemented. This will include different ground source heat pump systems and different geothermal power-plant configurations. Integrated Writing course.

For students of singing. Overview of financial, operational and compliance audits. Introduces key auditing concepts: materiality, risk assessment, audit objectives, evidence, internal control considerations, and computer assisted audit techniques. Integrated Writing course.

Addresses cognitive, effective, social, and physical characteristics of students with gifted and talented needs in the educational setting.

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Introduction to the many arts of the theatre including the roles of the actor, playwright, director, designer, critic, and audience. Selected scripts from representative historical periods are examined as an aid in understanding the theatrical event.

An introduction to the language of business with insights into Germany's place in the global economy.

Provided a format for integrating various psychological tests into a coherent battery. In addition to addressing the evaluation of various psychological disorders, an approach is provided for assessing the functional outcomes and clinical characteristics of behavior problems.

Introduction to automated lighting emphasizing skills needed to operate moving lights and effectively program consoles. Aesthetic and practical considerations regarding the use of moving lights in theatrical productions.

Techniques for effectively incorporating human factors considerations in the design and development of virtual environments. Includes coverage of input devices, head-mounted displays, health- and safety-related issues, and technologies for supporting human interactions in virtual spaces.

Theatre History. Introduction to the arts of the stage, with an emphasis on production spectacles. History of performance and its influence on modern theatre.

Paleobiology. Evolution and ecosystems, Historical geology: structure of the earth, and Elements of paleoecology.

Exposing students to the professional setting, use of assessment data to plan and implement dyslexia remediation in a professional setting. Write professional case study integrating assessment and tutoring data. Required: 450 hours of field experience.

Dance. Integrative Assessment course. Emphasis on movement, space and time, the relationship of music to movement, and the choreographer's role in the theater process.

Focusing on the use of computer education library programs including policies and procedures, facilities, budgeting, personnel, program evaluation, and marketing/advisory committees, Included field experience.

Lifeguard Training. An introduction to the science and practice of water safety and swimming instruction. Skills and competencies in swimming, rescue, and safety administration.

Introduction to the language of business with insights into Germany's place in the global economy.

Paleobiology. Evolution and ecosystems, Historical geology: structure of the earth, and Elements of paleoecology.

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Introduction to the arts of the stage, with an emphasis on production spectacles. History of performance and its influence on modern theatre.

Paleobiology. Evolution and ecosystems, Historical geology: structure of the earth, and Elements of paleoecology.

Exposing students to the professional setting, use of assessment data to plan and implement dyslexia remediation in a professional setting. Write professional case study integrating assessment and tutoring data. Required: 450 hours of field experience.
3. Study of experimental design, probability and statistics as applied to experiments, data acquisition, signal processing, measurement system behavior, strain measurement devices, temperature measurement devices, pressure and velocity measurement devices, and how to write a lab report. Introduction to fitting curves. For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D

UG LE Lecture

3. Classifications of wind turbines, power in the wind and the wind resource, parts of a wind turbine including blades, gearbox, and electric generator; and performance of wind turbines. (For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D).

UG LE Lecture

3. Surveys counseling and rehabilitation research, evidence-based practice, program evaluation, needs assessment, description, inferential, qualitative, and single-case design statistical analyses, and ethical and culturally relevant strategies for interpreting and reporting results. (For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D).

UG LE Lecture

3. Theory for the Music Educator will focus on practical applications of the information provided by analysis designed to enhance teaching and rehearsing. In addition, the course will address AP curriculum, student composition, and other ways in which music theory can be used in education. (For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D).

GR LE Lecture

3. Selected topics concerning the training of undergraduate majors in current methodologies used in cultural, biological and anthropological entomology. Topics vary.

GR LE Lecture

3. Designing, writing, and using creative ideas in developing advertisements with consideration of cultural diversity.

GR L Lecture/Lab Combination

3. Communication-intensive seminar integrating knowledge across disciplines. Independent study course.

GR IS Independent Study

3. Focuses on the day-to-day operation of a school building and a school system. State requirements are emphasized in relation to operational procedures in all aspects of managing a school and a school system.

GR LE Lecture


GR LE Lecture

3. Introduction to the principles and practices of objective personality assessment and report writing.

GR LE Lecture

1. Instruction Methods for Ed NUR Nursing 3

GR LE Lecture

1. Examination and application of the art, principle, theories, models, and strategies of teaching in nursing education. Role of nurse educator in professional education. (For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D).

GR LE Lecture

2. Advanced topics in modern biology of current interest. Topics vary.

GR LE Lecture

1. Reading in the content area that includes instruction in organizing instruction, use of protocols for oral language development, strategies for word-still development, reading comprehension and assessment for instructional purposes. (For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D).

GR LE Lecture

3. Analysis hardware security/trust and be able to implement various countermeasures to improve trust for hardware IC systems. Topics include IC design flow/lifecycle, trust issues at each stage of the IC lifecycle, attack methodologies that threaten HW IC systems, countermeasures to improve trust for HW IC systems, improving Trust for both ASIC and FPGAs based systems.

GR LE Lecture

4. Principles of covenantal binding, structures, and realities of molecules important in living things, with attention to related technological, regulatory, and social issues.

GR LE Lecture

5. Undergraduate independent studies in biotechnical engineering. Topics vary.

GR LE Lab

4. Research laboratory for ISE 4712. 

GR LB Lab

5. Religion in America REL Religion 3

GR LE Lecture

1. Theory and practice of computer processing of seismic reflection data. Deals with seismic data formats, seismic data manipulation, filtering, velocity analysis, stacking and migration, all in both land and marine contexts. Hands-on experience with industry-standard software packages.

GR LE Lecture

1. An introduction to middle level teaching. Topics include preparation of teachers, requirements for teacher licensure, professional organizations, middle school curricula, and effective practices. School visits will be part of the course.

GR LE Lecture

2. Study of music and critical analysis of representative works from major composers of the Baroque period. (For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D).

GR LE Lecture

1. Intermediate level of skills and knowledge in Wiccan training. Competency-based approach. Students should check competency levels posted in physical education building before enrolling.

GR IN Internship

1. Examinations following the period of the Roman Empire to ca. 1650. Topics vary and may include aspects of European, Islamic, or Byzantine civilizations.

GR SE Seminar

1. Data-Analytics Bus & Orgs MGR Management Information Systems 1

GR LE Lecture

1. Study of three fundamental beliefs in ethical thinking. UG LE Lecture

GR LE Lecture

3. Explore issues involved in management and design of supply chain. Topics include trade agreements, quality considerations, total cost calculations, international transportation, security issues, and third party resource issues. This course has a fee that is non-refundable once the term begins.

GR LE Lecture

1. A survey of the literature of the piano and its predecessors: clavichord, harpsichord, and the pianoforte— from the early English-Virginal music to the present time.

GR LE Lecture

1. Intermediate level of skills and knowledge in Rap-Defense Strategies: Intermediate, Competency-based approach. Course may accommodate student-scheduled visits. 

GR LE Lecture

1. The clinical focus of this course is on continuing clinical competencies for the nurse practitioner in the Level IV neonatal intensive care unit. The course continues the exploration of endocrinology, neonatal pathophysiology, and management of the disease process. Students will apply current management strategies and will obtain best evidence to provide high-level care for infants and their families.

GR LE Lecture

1. Covers current understanding of endocrine functions and the impacts of biologically significant and the distribution of life on earth.

GR LE Lecture

1. Theories, methodologies, and applications in the areas of attention, perception, visual imagery, memory, executive performance, decision making, and problem solving. Emphasis on learning when to use each technique as well as their theoretical underpinning. This course has a fee that is non-refundable once the term begins.

GR LE Lecture

1. Study of the criminal justice system in operation. The student will be expected to compare classroom theory with the day-to-day operation of the agency to which they are assigned and the roles and responsibilities of the professional in the field. Total of 40 clock hours required.

GR IN Internship

1. Special Problems in Music Education MUS Music 3

GR LE Lecture

1. Study of performance music and critical analysis of representative works from major composers of the Baroque period. (For Department Managed Prerequisites(): Undergraduate level EGR 2308, Minimum Grade of D and Undergraduate level MTH 2350 Minimum Grade of C and Undergraduate level ECE 2303 Minimum Grade of D and Undergraduate level ECE 2304 Minimum Grade of D).

GR LE Lecture

1. Study of human life and its surrounding environment. Emphasis will be placed on learning when to use each technique as well as their theoretical underpinning. This course has a fee that is non-refundable once the term begins.

GR LE Lecture

1. Covers current understanding of endocrine functions and the impacts of biologically significant and the distribution of life on earth.

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GR LE Lecture
This course will apply the 0th, 1st, 2nd, and 3rd laws of thermodynamics, as well as conservation of mass, to a range of classical thermodynamic systems and phenomena. These include power and...
Course focuses on principles, resources, technology, critical thinking skills, historiography, and social science research for adolescence social studies. This course will also focus on teaching in the classroom. 

EDG2400 4820 Introduction to Quantum Mechanics 1
PHY Physics 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

ART2020 2020 2D-Design and Color
ART Art 3 Laboratory exercises to accompany ATH 2100, Introduction to Biological Anthropology.

ENG1020 1020 Basic Writing: ESL
ENG English 3 Examination that tests understanding of the fundamentals necessary to begin concentrated study in chosen Ph.D. research area. GR IS Independent Study

EDU3010 3010 Data Analysis
EDU Education 3 Applied Time Series
STT Statistics 3 Statistical models for discrete time series in the time-domain, moving average processes, autoregressive processes, model identification, parameter estimation, and forecasting. Statistical computing software packages are used.

CHI3020 3020 African American Music
MUS Music 3 Survey of the development of African American music from a historical, sociological, and cultural perspective. Analysis of the genres, influences, and impact on American and world culture. Integrated Writing course.

CHI3200 3200 Advanced Chinese II
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

CHI3010 3011 Chinese Studies
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

CHI3050 3050 Chinese and Cultural Studies
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

CHI3060 3060 Chinese and Cultural Studies
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

CHI3070 3070 Chinese and Cultural Studies
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

CHI3080 3080 Chinese and Cultural Studies
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

CHI3090 3090 Chinese and Cultural Studies
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.

CHI3100 3100 Chinese and Cultural Studies
CHI Chinese 3 Other practitioners so they may become more aware and more able to communicate with their peers. Focuses on the major theoretical views of human attention in the literature, their implications on human performance in complex, dynamic systems, and their implications on human factors in design.
EGR 3430  4330  Egr in Occup Safety & Mgt  3  Industrial & Materials Sys Engr  Discusses and demonstrates the role and responsibility of engineers in occupational safety and health-related issues. Focuses on human factors engineering design principles as a practical approach for cultivating occupational engineers.

EGL 7551  7751  Intel Lneking Chng  STEM  EDL  Educational Leadership  3  Strategies for developing and maintaining continual improvement processes using systems planning and instructional data, evaluation of improvement plans, and communicating planning and improvement with all stakeholders within various organizational contexts.

HPS 2030  2030  Teaching Natl Values  HRP  Health Phys Educ & Recr  3  This activity class models best teaching practices in natural values such as breathwork, tennis, and volleyball. Students are required to demonstrate skill competency.

EES 6310  6310  Guo Aear of Envir Analysis  EES  Earth & Environmental Sciences  0.5  This course surveys the fundamentals of Quality Control and Quality Assurance for analysis of environmental samples.

MGT 4750  4750  Train, Devlp, Perf Mgt  MGT Management  5  Introduction to the concepts, processes, and issues associated with training and development of employees. Covers planning, implementing, and evaluating training programs as well as creating a direct link between employee performance and organizational objectives.

PLS 7751  7771  Principle of Intelligence  PLS  Political Science  2  The seminar examines the role of intelligence in security, and the rigorous analysis of techniques. Analysis data collection, analysis, and policy recommendations to develop and sustain critical assessments are the focus.

PLS 8000  8000  Selected Topics  Political Science  5  Topics vary.

PSY 6960  6960  Uniro Symphony Orchestra  MUS  Music Ensembles  1  Performa orchestral music of all styles and periods.

CS 7700  7700  Comput Gr Egr Anal  CS  Electrical Engineering  1  Students will learn how to design optimal computational techniques that are used in many situations in modeling, simulation, and analysis of engineering problems.

PDI 4400  4400  Level 4 Academic Success  LEAP  3  Participants will learn how to succeed academically by practicing skills and strategies for understanding academic lectures, by practicing note-taking and organization, and by practicing advanced academic vocabulary. Listening comprehension will be improved through a variety of interactive listening and discussion tasks based on academic lectures and conversations.

CHM 4940  4940  Mech & Mat Ed  Inter Med  ME  Mechanical and Materials Engr  3  Department internship courses. Students are supervised via weekly seminars and regular feedback from employer. Must have completed all of the 2nd year courses as listed in the program guide.

THI 5200  5200  Sound Design  TH  Theatre  3  Introduction to the craft and art of sound design. Emphasis on physics of sound, signal flow, basic equipment usage and maintenance. Include theory and practice for both on-field sound and sound scores for the theatre.

HRT 7370  7370  Medical Devices  HRE  Health & Hum Pac Engr  3  For students who are interested in acquiring a broad-based knowledge in the human factors of medical instrumentation and devices. Approaches the design and implementation of medical technology from the perspective of patient safety and product safety.

DOS 6960  6960  Adv Search Methods II  DOS  Doctoral Org Studies  3  Developing research practices in basic and inferential statistics using statistical computing software and critical interpretation of social sciences research design and analysis.

EES 6160L  6160L  Stratigraphy & Sed. Lab  EES  Earth & Environmental Sciences  1  Required laboratories for EES 1610. Topics will cover the formation, development, and evolution of large-scale sedimentary environments.

FAN 8400  8400  Physiology Seminar  FAN  Physiological & Neurological Science  1  Two seminars (Physiology Seminar I and II) run concurrent with the Department of Neuroscience, Cell Biology and Physiology Seminar.

EE 6470  6470  Wireless Comm  EE  Electrical Engineering  3  Overview of wireless communication: cellular network concept, wireless communication channel and multi-path fading, digital modulation/demodulation techniques for wireless communication, performance analysis, equalization, diversity, and MIMO receiver, spreading spectrum technology and CDMA, cognitive radio and dynamic spectrum access, and wireless communication system simulation.

THD 5100  5100  Stage Management  TH  Theatre  3  Theatre  Skills and processes required of the working stage manager. Explores practical solutions to problems of stage management.

BIO 5440  5440  Adv Special Topics  BIO  Biology  3  Analyzes topics such as methodology and its relationship to the impact of science in society. Special topics will vary from year to year with emphasis on the history of science, current issues in the sciences, and ethical aspects of modern science.

DOS 6960  6960  Adv Search Methods II  DOS  Doctoral Org Studies  3  Developing research practices in basic and inferential statistics using statistical computing software and critical interpretation of social sciences research design and analysis.

EE 6160L  6160L  Stratigraphy & Sed. Lab  EES  Earth & Environmental Sciences  1  Required laboratories for EES 1610. Topics will cover the formation, development, and evolution of large-scale sedimentary environments.

FAN 8400  8400  Physiology Seminar  FAN  Physiological & Neurological Science  1  Two seminars (Physiology Seminar I and II) run concurrent with the Department of Neuroscience, Cell Biology and Physiology Seminar.

EE 6470  6470  Wireless Comm  EE  Electrical Engineering  3  Overview of wireless communication: cellular network concept, wireless communication channel and multi-path fading, digital modulation/demodulation techniques for wireless communication, performance analysis, equalization, diversity, and MIMO receiver, spreading spectrum technology and CDMA, cognitive radio and dynamic spectrum access, and wireless communication system simulation.

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This course offers an overview of basic sensor technology to provide the engineering student with practical working knowledge of sensors. Course will include basic operating principles, basic design of sensors, and use of sensor data.

Lecture
This course guides individual research projects to ensure that the project demonstrates the student’s ability to take a problem from inquiry and data gathering, through analysis and solution identification, to final presentation.

Survey course emphasizing an experimental and problem-solving approach to metabolism, nucleic acid function, protein synthesis, membranes and hormones.

Capstone project for senior majors involving independent research: service learning, or creative project. Topic varies from year to year. Consent of instructor.

Practical applications of conducting, teaching, and rehearsing in actual conducting situations with live orchestral performers.

Students will produce a portfolio integrating knowledge, skills, and principles regarding the writing and revision of original poetry. Students will produce a portfolio integrating knowledge, skills, and principles regarding the writing and revision of original poetry.

Failing Concentration including IE mitigation and Adaptative Equilibrium, Diversity, Coexisting and horizontal relationships for ecosystem stability. Speech Coding, Multispecies, and horizontal relationships for ecosystem stability.

Evaluates evolution of community development theory and practice in the U.S. and examines the process of community building and asset-based community development. Topics to help community members define community needs and identify community assets, analyze and present qualitative data, and develop critical thinking and problem-solving skills as they relate to community development.

Faculty-directed, individualized study on student-selected topics such as Information Communication Technologies (ICT), Instructional Design, Learning Pedagogies, educational or training processes, or other similar fields. Limited to advanced students that students allow to experience minimum of openness. Permission to enroll depends on approval of availability of faculty. Must be in the following levels: Graduate, Instructional Design and Learning Technology.

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This course guides individual research projects to ensure that the project demonstrates the student’s ability to take a problem from inquiry and data gathering, through analysis and solution identification, to final presentation.
Spring 2023

CS35160  5160  Computer Science Fundamentals  CS  Computer Science  6  Hands-on survey of the fundamental concepts of computer science including: fundamentals of programming language design, analysis, and selection, computational complexity, and data structures.

SCM23230  3330  Planning for SCM  SCM  Supply Chain Management  3  Planning and control of productive activities in supply chain, planning of inventories and production quantities. Management of physical and information flows and control information systems.

ART3670  3670  Bag Printing, Intaglio  ART  Art  3  Exploration of printmaking through relief methods: etching, engraving, woodcut, aquatint, and woodblock. Focus on traditional and experimental techniques.

SOC2210  2210  Exploring Social Problems  SOC  Sociology  3  Focus on specific social problems. Topics vary.

PSY2710  2710  Developmental Psychology  PSY  Psychology  3  Overview of the systems approach to organizational management, planning, and intervention in human service organizations. Case studies are employed.

SPN2810  2810  Spanish Phonetics  SPN  Spanish  3  Study of the vowel and consonant sound system of Spanish. Spanish phonetics and intonation. (Instructor permission required.)

HIST7110  7110  Seminar on US since 1865  HIST  History  3  Examines US history since the Civil War. Topics vary and may include Reconstruction, the Progressive Era, and the rise of the US as a world power.

CEG6181  6110  Intro to Software Engineering  CEG  Computer Engineering  3  Introduction to the concepts of Software Engineering. Software qualities, development life-cycle models, requirements analysis, semi-formal and formal systems modeling, system design, testing, and project management techniques. Case study and a course project serve as examples illustrating the software engineering process.

SW2710  2710  Intro to Social Welfare  SW  Social Work  3  Study of federal and state social welfare in the United States, with an emphasis on policies that reduce poverty, oppression, and discrimination. Study the values and ethics that form the foundation of social services.

BIO110L  110L  The Aquatic Environment Lab  BIO  Biology  0  Lab course for BIO 110L.

NUR220L  220L  Nursing Fundamentals Lab  NUR  Nursing  0  Lab course for NUR 220L.

ENG4810  4810  Internship: Creat. Writing  ENG  English  3  Supervised professional experience in the Creative Writing field.

ED0710  710  Great Field Experience  ED  Education  3  Introduces students to the educational process through participation in a P-12 classroom and through an examination of classroom dynamics.

PHY5520  5520  Nuclei & Particle Physics  PHY  Physics  3  Nuclear fusion, nuclear reactions, nuclear transformations, and elementary particles and interactions. Relativistic energy-relationships.

THD3200  3200  Stage Management II  TH  Theatre  3  Skills and processes required of the working stage manager. Explores practical solutions to problems of stage management in operas, dramas, and musicals.

FIL5671  5671  Fundamentals of Independent Film Production  FILM  Political Science  3  Introduction to the technical, artistic, and organizational aspects of filmmaking. Topics vary.

PAB7990  7990  Continuing Registration  P&M  Physician & Neurology  1  By permission of instructor.

ATH6101  6101  Kinesiology/Structural Anatomy  ATH  Anthropology  3  Introduction to the study of kinesthesia as the basis for understanding structural stresses cross-culturally. Starts with the basic codes for classic kinesthetic analysis, and proceeds to discuss the central role of kinesthesia plays in stable societies, how state formation utilizes kinesthetic analysis, and how kinesthesia relates to issues of hierarchical organization, class and gender relations.

EOE3090  3090  Remote Sensing of Earth  EES  Earth & Environmental Sciences  3  Remote sensing from an earth science perspective. Students learn to interpret various types of images including stereo air photos, remote multi-spectral digital images and satellite images. Hands-on digital image processing using industry standard software.

THA2490  2490  Advanced Theatre Crafts  TH  Theatre  3  Theatre design and technology, such as furniture building, advanced lighting or sound design, make-up, prosthetics and special effects. Topics vary.

BIOD640  640  Biogeography  BIO  Biology  3  Introduction to the factors affecting the distribution of plants and animals.

RHE3830  3830  Disability Rights  RHE  Rehabilitation  3  Focused on disability culture, justice, and history, including community access, independent living/self-determination, and inclusion. Examines various disability policy frameworks and applications.

STT6610  6610  Theory of Statistics I  STT  Statistics  4  Probability, random variables, density and distribution functions, expectation, moment generating functions, discrete and continuous distributions, joint, marginal and conditional distributions, independence, properties of expected values, functions of random variables, central limit theorem, statistics and sampling distributions. (Instructor permission required.)

BME3310  3310  Ergonomics  BME  Biomedical Engineering  3  Introduction to the application of ergonomics principles in industrial environment. Includes ergonomic planning and implementation, the work environment, occupational biomechanics/CTDs, FOGH worksite, and workstation & equipment design. This course will be complemented with case studies of actual manufacturing operations. (Instructor permission required.)

ECE21  21  Economics for Public Finance  EC  Economics  3  Develops theoretical framework and working knowledge of the economic basis for public policies, government expenditures, programs, and the financing of these programs. Topics vary.

ENG5101  5101  Basic Acad Sp Lit  EFL  English  3  Basic approach in spoken English, both production and comprehension. Open only to non-native speakers of English.

THD2800  2800  Movement I  TH  Theatre  3  Continued study of physical alignment, warm-up, warm-up methods, and exploration of movement dynamics as they relate to acting. A range of established disciplines will be incorporated in this study.

SOC3800  3800  Social Policy  SOC  Sociology  3  Introduction to factors influencing the structure and growth of human populations and the social consequences of population change. Examines factors of population variability and their impact on society.

AIR1020  1020  Intro to Tactical Lifesaving  MIL  Military Science  3  Overview of leadership fundamentals such as selection, direction, problem-solving, briefing, presentingbrief, contracting, feedback, and effective writing tools. Explores dimensions of leadership attributes and core leader competencies in the context of practical, hands-on, and interactive tools.

CST5280  5280  Semantic Web  CS  Computer Science  3  This course is about the Semantic Web, a key enabler of Web 3.0. It goes beyond the recent language standards of RDF and OWL, to understand new techniques, technologies and algorithms for making a broad variety of data meaningful and more amenable to processing by humans and machines (on the Web, as Web services, generated in social networks generated by sensors and mobile devices). Topics include research in semantic search, browsing, integration, analysis and discovery (Instructor permission required.)

SCM9800  9800  Strategic Sourcing  SCM  Supply Chain Management  3  Strategic sourcing, including the tactical and functional operations of purchasing as well as proactive establishment, management, and optimization of the firm’s supply base of goods and services to improve supply chain performance.

ACC7500  7500  Accounting Internship  ACC  Accountancy  3  One semester, faculty-supervised internship in the area of public, industrial, or not-for-profit accounting. Course requires written reports. Students may register for internship once during their undergraduate programs. May be taken for pass/fail grading.

SWK3700  3700  Hum Behav Soc Env  SW  Social Work  3  Analysis of human behaviors in order to guide assessment, intervention, and evaluation of social work practice. Includes theories such as the psychodynamic, behavioral, ecological, and normative life stages.

EGR4430  4430  Geographical Information Systems  GEO  Geography  4  Principles, structure and application of maps and micro and spatial analytical techniques. Use of islgis and software to create map layers that can be overlaid and interpreted.

MUS2270  2270  Woodwind Pedagogy  MUS  Music  3  The study of materials, equipment and class instruction in playing and teaching woodwind instruments in public schools.

ME8430  8430  Comp. Materials Science  ME  Mechanical and Materials Engr  3  This course covers basic theories, methods, and methodologies of atomic computer simulations of materials. Classical, semi-empirical, and ab initio quantum-mechanical methodologies are explored. (Instructor permission required.)

AER6450  6450  Aerospace Structures  ME  Mechanical and Materials Engr  3  Analysis and design of flight structures. Stress, deformation, and stability analysis of aerospace structures. Thin-walled members bending, torsion, and shear stresses calculation in multi-cell structures. Building of this plane (Instructor permission required.)

EGR4740  4740  Post-Colonial Lit  ENG  English  3  Intensive study of post-colonial literature from diverse regions of the global South. Intended to develop critical perspectives on historical periods, genres, language use, thematic concerns, and global comparisons.

IT2400  2400  Employability Portfolio Dev  IT  Information Technology  2  Development of effective job strategies including application forms, cover letters, and resumes. Development of a multimedia portfolio.

HIST5110  5110  Interpretation & Ethical Hist  HST  History  3  Examination interpretation and theory and practice. Design and construction of a museum exhibit, talk, audience, selection, media and interaction, exhibition reception.

ENG4730  4730  TESOL Theory and Culture  ENG  English  3  Presents a historical foundation for the study of second language acquisition. Includes awareness of first language acquisition. Builds awareness of cultural differences and addresses the impact of cultural and personal variables on English language learning. Integrated writing course. (Instructor permission required.)

EDS150A  150A  Philosophy (Dis)orientation  EES  Earth & Environmental Sciences  0  Required laboratory for EES 150A.

CS5200  5200  Spec Topics in Comp Sci  CS  Computer Science  3  Special Topics in Computer Science.

AES3430  3430  SCL Lab  AES  Aerospace Studies  0  Preparation for progressivity active. Cadet takes leadership roles in execution of leadership tasks for the cadet wing. Students hone leadership fundamentals to a level commensurate to entry in the Corps of Cadets.
This course will provide a series of laboratory experiments similar to the state-of-the-art R&D in nanotechnology and nanoscience. The experiments include:

1. Fabrication of nanomaterials such as metal nanoparticles and graphene nanopolymers.
2. Characterization of physical and chemical properties by using techniques such as Raman spectroscopy, atomic force microscopy, scanning electron microscopy, and computational modeling.

Contemporary legal issues impacting corrections management. Using case law, the course will cover the First, Fourth, Fifth, Eighth, and Fourteenth Amendments to the U.S. Constitution, as well as other constitutional issues. Graded based on written cases and legal analysis.

The course gives special attention to the importance of communities and the work of nonprofit organizations. Integrated Writing course.

Students will learn about the main components of literacy, as well as how to choose, administer, and analyze a wide variety of literacy assessments (both reading and writing) to implement in their classrooms.

Survey of investigative techniques focusing on specific problems related to business and public health. Graded based on written cases and legal analysis.

This course examines the judicial process, civil litigation (torts, contracts, family law) and pertinent constitutional issues. Graded based on written cases and legal analysis.

Provides developing professional educators instruction in current trends, issues and methods in adolescence and young adult social studies. Graded based on written cases and legal analysis.

Course gives special attention to the importance of communities and the work of nonprofit organizations. Integrated Writing course.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO3050</td>
<td>Introductory Microbiology</td>
<td>3</td>
<td>UG</td>
<td>Study of the fundamental laws of life at the cellular and molecular level, including cell structure and function, genetics, evolution, and basic concepts of microbiology.</td>
</tr>
<tr>
<td>CHM1110</td>
<td>General Chemistry: Fundamentals</td>
<td>5</td>
<td>UG</td>
<td>A study of the nature and properties of matter, with an emphasis on atomic and molecular theory, chemical equations, thermodynamics, and stoichiometry.</td>
</tr>
<tr>
<td>CHE2010</td>
<td>Physical Chemistry: Gas Laws and Solutions</td>
<td>4</td>
<td>UG</td>
<td>Study of the behavior of gases and solutions, including the ideal gas law, the solution concept, and the effect of temperature and pressure on solubility.</td>
</tr>
<tr>
<td>CHE2210</td>
<td>Inorganic Chemistry: Principles of Coordination</td>
<td>3</td>
<td>UG</td>
<td>Study of the electronic configuration and bonding in transition metal complexes, with an emphasis on ligand-field theory and complexation reactions.</td>
</tr>
<tr>
<td>CHE3110</td>
<td>Physical Chemistry: Spectroscopy and Spectroscopic Methods</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of various spectroscopic techniques, including infrared, Raman, and UV/Visible spectroscopy.</td>
</tr>
<tr>
<td>CHEM3110</td>
<td>Organic Chemistry: Functional Groups and Reactions</td>
<td>4</td>
<td>UG</td>
<td>Study of the structures, reactions, and properties of functional groups in organic compounds, including alcohols, ethers, amines, and carboxylic acids.</td>
</tr>
<tr>
<td>CHEM3310</td>
<td>Physical Chemistry: Thermodynamics</td>
<td>4</td>
<td>UG</td>
<td>Study of the laws of thermodynamics, including heat, work, and energy, and the properties of matter under various conditions.</td>
</tr>
<tr>
<td>CHEM3410</td>
<td>Physical Chemistry: Kinetics and Rates of Reaction</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of kinetics, including reaction rates, mechanisms, and enzyme catalysis.</td>
</tr>
<tr>
<td>CHEM3510</td>
<td>Physical Chemistry: Equilibrium</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles of equilibrium, including Le Chatelier's principle, the effect of temperature, pressure, and concentration on chemical processes.</td>
</tr>
<tr>
<td>CHEM3610</td>
<td>Physical Chemistry: Spectroscopy and Spectroscopic Methods</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of various spectroscopic techniques, including infrared, Raman, and UV/Visible spectroscopy.</td>
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<tr>
<td>CHEM3810</td>
<td>Physical Chemistry: Thermodynamics</td>
<td>4</td>
<td>UG</td>
<td>Study of the laws of thermodynamics, including heat, work, and energy, and the properties of matter under various conditions.</td>
</tr>
<tr>
<td>CHEM3910</td>
<td>Physical Chemistry: Kinetics and Rates of Reaction</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of kinetics, including reaction rates, mechanisms, and enzyme catalysis.</td>
</tr>
<tr>
<td>CHEM4010</td>
<td>Physical Chemistry: Equilibrium</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles of equilibrium, including Le Chatelier's principle, the effect of temperature, pressure, and concentration on chemical processes.</td>
</tr>
<tr>
<td>CHEM4110</td>
<td>Physical Chemistry: Spectroscopy and Spectroscopic Methods</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of various spectroscopic techniques, including infrared, Raman, and UV/Visible spectroscopy.</td>
</tr>
<tr>
<td>CHEM4310</td>
<td>Physical Chemistry: Thermodynamics</td>
<td>4</td>
<td>UG</td>
<td>Study of the laws of thermodynamics, including heat, work, and energy, and the properties of matter under various conditions.</td>
</tr>
<tr>
<td>CHEM4410</td>
<td>Physical Chemistry: Kinetics and Rates of Reaction</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of kinetics, including reaction rates, mechanisms, and enzyme catalysis.</td>
</tr>
<tr>
<td>CHEM4510</td>
<td>Physical Chemistry: Equilibrium</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles of equilibrium, including Le Chatelier's principle, the effect of temperature, pressure, and concentration on chemical processes.</td>
</tr>
<tr>
<td>CHEM4610</td>
<td>Physical Chemistry: Spectroscopy and Spectroscopic Methods</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of various spectroscopic techniques, including infrared, Raman, and UV/Visible spectroscopy.</td>
</tr>
<tr>
<td>CHEM4810</td>
<td>Physical Chemistry: Thermodynamics</td>
<td>4</td>
<td>UG</td>
<td>Study of the laws of thermodynamics, including heat, work, and energy, and the properties of matter under various conditions.</td>
</tr>
<tr>
<td>CHEM4910</td>
<td>Physical Chemistry: Kinetics and Rates of Reaction</td>
<td>4</td>
<td>UG</td>
<td>Study of the principles and applications of kinetics, including reaction rates, mechanisms, and enzyme catalysis.</td>
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</tbody>
</table>

**Note:** The above courses are a selection from a larger database. The database includes courses from various institutions and departments, covering a wide range of topics such as biology, chemistry, physics, and more. Each course is identified by its unique code and title, along with the corresponding credits and type of course (UG for undergraduate, GR for graduate, or LB for laboratory). The description for each course outlines the main topics covered, the objectives, and the learning outcomes. The courses are designed to provide students with a comprehensive understanding of the subject matter, preparing them for advanced studies or professional careers.
This course is an introductory survey of the earth sciences, from rocks and minerals, through plate tectonics, geologic time, oceanography and meteorology, to planetary science. Lecture is interspersed with hands-on activities intended to reinforce concepts and to provide the students with ideas for teaching their own classes. Students will also develop lesson plans on several topics.

Additional feedback, in-class peer evaluation, and group presentation will provide the successful solution of interdisciplinary open-ended engineering problems. Integrated Writing course.

Biophotonic and optical imaging concepts. Backscattered light detection in tissue, modern microscopy techniques, diagnostic use of lasers (optical biopsy, optical spectroscopy, optical imaging) and their clinical applications, and related optical phenomena. Introduction to photophysics and photobiology, and their applications involving optical molecular imaging. Includes basic biophysical and optical techniques.

A course project is an open-ended research project which gives students the opportunity to test if their interest in a particular career path exists outside of the classroom. This project will involve working with students from different disciplines.

The syllabus is designed to provide students with a comprehensive understanding of fundamental mathematics and their applications in various fields. It covers topics such as calculus, linear algebra, probability, and statistics, among others. The objectives are to develop a strong foundation in mathematical concepts and to prepare students for further studies in science, engineering, and other fields that require a strong mathematical background.

...
A development and integrated approach to teaching language arts (reading, writing, speaking & listening and language) in a middle level grades 4-8 classroom. 

The class will cover topics such as mathematical theory on host-pathogen interactions; empirical studies of human, wildlife, insect and plant host interactions; emerging infectious diseases; effects on host behavior; host-parasite co-evolution; multi-host and multi-pathogen systems; and anthropogenic effects on diseases. The greatest depth of understanding has been achieved at the local level of population design, specifically interactions between a host and a pathogen. The broader goal of the class is to provide a comprehensive and up-to-date understanding of the causes and consequences of infectious diseases at low levels from individuals to organisms in the global environment.
In this course, students conduct practical applications of technologies, from prediction to marketing intelligence to marketing analytics. Specific data analytic methodologies covered include predictive analysis, data mining, text mining, and Big Data-related technologies. Department Managed Prerequisite(s): Graduation level MBA 7600 Minimum Grade of C (7600) Minimum Grade of C (7670) can be taken concurrently for credit.

In this course, students study advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required. Department Managed Prerequisite(s): Undergraduate level MTH 4310 Minimum Grade of D or Undergraduate level GER 3610 Minimum Grade of D or Undergraduate level GER 3320 Minimum Grade of D and Undergraduate level GER 3510 Minimum Grade of D or Undergraduate level MTH 4310 Minimum Grade of D or Undergraduate level GER 3320 Minimum Grade of D or Undergraduate level MTH 4300 Minimum Grade of D.
LE The aggregate economy and how it influences business decisions. The forces that determine the behavior of national income and output, unemployment and the price level. Money, monetary and fiscal policy and growth.

LE Introduction to the representation, manipulation, and analysis of large datasets from a user's perspective. Topics include data filtering, clustering, classification, and data mining. The basic principles behind each technique are first introduced and then numerical experiments demonstrate their applicability. Standard softwares and programming languages are used. Department Managed.

LE Fundamentals of political science and the political process unique to microeconomics and macroeconomics. Basic principles of data collection and descriptive statistics: accuracy of probability, descriptive statistical random variable and probability distributions; sampling theory; statistical inference; correlation/regression; analysis of variance; and dispositions gained in previous coursework.

LE Study of the physiological and biochemical processes unique to microeconomics and macroeconomics. Basic principles of data collection and descriptive statistics: accuracy of probability, descriptive statistical random variable and probability distributions; sampling theory; statistical inference; correlation/regression; analysis of variance; and dispositions gained in previous coursework.

LE Development of performance skills in vocal jazz. Emphasis is placed on technique and style, improvisation, and jazz theory. Audition required.

LE Examination of basic histological and histochemical characteristics of various tissues and organs. Includes morphological and histochemical techniques. Laboratory practicals included. Department Managed.

LE Introduction to the representation, manipulation, and analysis of large datasets from a user's perspective. Topics include data filtering, clustering, classification, and data mining. The basic principles behind each technique are first introduced and then numerical experiments demonstrate their applicability. Standard softwares and programming languages are used.

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3500  Sociological Theory  SOC  Sociology 3  Introduction to sociological theory focused primarily on the ideas, concepts, assumptions, imagery and classical roots of major contemporary theoretical orientations. Integrated Writing course.

3140  Psycholinguistics  PSY  Psychology 3  Advanced examination of auditory psychophysics and perceptual processes involving consideration of peripheral and central auditory physiology whenever possible.

7080  WLS Adv Synth Opt Lab  ESC  Computer Engineering 1  Required for laboratory for EE 7505. (Undergraduate level EE 4650 Minimum Grade of D and Undergraduate level EE 4650. Minimum Grade of D or Graduate level EE 6202 Minimum Grade of D and Graduate level EE 6202. Minimum Grade of D-or)

6560  Wind Power ME  Mechanical and Materials Eng 3  Classifications of wind turbines, power in the wind and the wind resource, parts of wind turbine including blades, gears, and electric generator; and performance of wind turbine. (Undergraduate level ME 3255 Minimum Grade of C or Graduate level ME 3255 Minimum Grade of C or Graduate level ME 5250 Minimum Grade of D-or)

5120  Math Content Stand Is  EDS  Education - Special Education 1  Introduction to Ohio Department of Education K-12 through grade education content standards. Addresses mathematics knowledge, pedagogy, and PPRS exam expectations.


4830  Topics in Gender History  HST  History 3  Intensive analysis of subjects in gender history. Topics may include masculinity, femininity, sexuality, family and women's history. Focus may be on one nation, region or comparative perspective.

2800  Educational Technology  EDS  Education Technology 3  Use of computer-based technology in K-12 instruction. Focus is on selecting courseware and integrating it into lessons.

4370  Math Methods for MCE  ED  Education 3  A study of curriculum, materials, and methodology for teaching mathematics in the middle school, grades 4-8. This includes lesson planning, assessment, differentiation, technology, and pedagogical content knowledge.

4460  Stud Lit Genre/Theme  ENG  English 3  Intensive study of literary genres (e.g., poetry, the novel, satire) or of literary themes. Intended to develop an understanding of formal and structural aspects of literary integration. Written coursework.

8550  Select Top Phys Chem  CHM  Chemistry 1  Select topics in the field of physical chemistry such as molecular spectroscopy, advanced molecular structure, magnetic resonance, 1,3-cyrcles, crystal structure methodology, and precision physical-chemical measurements.

3660  Water and Solid Waste  EES  Environmental & Earth Sciences 4  Relationship of physical and biotic environments to design and operation of systems and procedures employed in maintenance and structural protection of a quality environment.

1210  Business Chinese  CHN  Chinese 3  Focus on Chinese business practices and marketing of Chinese goods and services.

4110  Introduction to the language of business Chinese with insight into China's place in the global economy. (Undergraduate level ME 3255 Minimum Grade of C or Graduate level ME 3255 Minimum Grade of D-or)

2260  Digital Signal Pro EE  ECE  Electrical Engineering 3  Introduction to the study of digital signal processing with emphasis on continuous and discrete time and frequency domain algorithms. Methods include multi-rate signal processing, filter banks, time-frequency analysis, and wavelets.
Spring 2023

EDL7130 7130 Arts psyche Learning Theory EDL Educational Leadership 3 Selected topics certified/licensed in special education. Emphasis on the relationships among learning theories, learner characteristics, motivational theories, and instructional practices. GR Lecture

EDG2200 6280 Literacy Lessons Certification ED Education 3 Testing certification/licensed in special education. Emphasis on the relationships among learning theories, learner characteristics, motivational theories, and instructional practices. GR Lecture

BMST10 7130 Core Control Lab SBM Biomedical Sciences 1 Laboratory supporting BM S7120. Students will experiment hands on in learning lab. Application and testing of control systems theory with electromechanical systems. GR Lab

CITE4360 4830 Integrating Academ CTI CTE Career and Technical Education 3 Per state requirements, CTE educators must know how to incorporate academic standards into every day lessons. Includes techniques on integrating core academics into technical programming and instruction. GR Lecture

BME4410 4920 BME Design II BMS Biomedical Engineering 3 Segment two of the BME senior design sequence. Prerequisite results in the final engineering design and completion of the design project. Integrated Writing course. CR Lecture

EE5410 5410 Phy Geo/Phot Hol Oat EES Earth & Environmental Sciences 2 This is a fall lab course examining the landforms, processes, and deposits associated with Pleistocene continental glaciation, as well as subsequent post-glacial terrain modification. The course includes 1 day of fieldwork and 4 days of thematic field trips. GR Lecture/Lab Combination

ED7010 7010 Selected Topics in Bio BIO Biology 1 Instrumental ensemble, consisting primarily of string and varying combinations of wind and percussion instruments, devoted to the study and performance of music written for that medium. CR Topic vary

NUR6770 6770 Chamber Orchestra MUS Music: Ensembles 1 Survey of music literature, melodic counterpoint, and musical technique. CR Lecture

PSL5400 5410 Fund Clin Research ILS Political Science 1 Survey of techniques and strategies focusing on specific problems and crimes to illustrate proper methods and procedures of criminal investigation. CR Lecture/Lab Combination

PSY1730 4730 Hearing headphone CPSE Psych 1 Communication-intensive seminar integrating knowledge on the perception of hearing. Integrated Writing course. CR SE Seminar

ED1710 7120 Lit Int Re Learners ED Education 2 Developing knowledge of a wide variety of children's literature. Demonstrate understanding of how to use diverse texts as an instructional tool to meet the needs of a diverse culture. GR Lecture/Lab Combination

HNK135A 1260A HDO Deep Conditioning KNH Knowledge & Health 1 Fundamental skills and knowledge of HDO Deep Conditioning. Competency-based approach. Course may accommodate disabled students when appropriate. CR Lecture/Lab

CSC1900 4380 Combustion and Graphs CS Computer Science 4 Permutations, combinations, generating function, recurrence relations, and Polya’s theory of counting methods, results, and algorithms of graph theory. Emphasis on graph theory and its animation. CR Lecture

BME7617 7421 Rehab Eng Systems BMS Biomedical Sciences 1 The course covers the complete structure of the rehabilitation engineering service delivery systems practiced in the result. Covers basic disability areas, current laws, resources, and rehabilitation technology. CR Laboratory

ATR9250 3820 Achieve hI athletic I II ATR Athletic Training 3 depth coverage of cellular neuroscience with an emphasis on physiological concepts. Subjects include nervous system development, generation of tonic innervation, synaptic transmission, and ion channels CR Lecture

ASM3000 7000 Accident Investigation ASM Aerospace Space 3 This course provides an overview of aerospace accident investigation procedures, relevant regulations, and interplay between an aerodynamic perspective. Selected advanced topics include the analysis of relevant aerospace accident reports. CR Laboratory

LDR9100 7010 Theories of Leading LDR Leadership 1 A variety of theories beyond what leading, organizing, and organizational change with a focus on how such theoretical approaches informs and influences the practice of leadership in real world settings. CR Topic vary

FAS1010 1010 Agricultural Soc FAAS Food and Agricultural Systems 1 Introduction to areas of study within the field of agriculture and their importance to human society. Additional topic courses will include analysis of the history and development of agriculture, current issues relevant to rural agricultural society, and future areas of development CR Lecture/Lab Combination

SLD1070 3570 Business of Interpreting SLI Sign Language Interpreting 1 Explains the business and professional aspects of interpreting for the Deaf. Topics include: voice, diction and spoken texts. CR Lecture

THD940 2440 Acting II TH Theatre 3 Exploration of a role through intensive application of acting, motion, voice and text analysis skills. Emphasis on deep personalization of character objectives and tactical range. Study of audition skills and techniques. CR Lecture/Lab Combination

PHL3670 3670 Philosophy of Mind PHL Philosophy 3 Central issues in the philosophy of mind, including mind and brain, identity theory, nature of consciousness and qualia, agency, intentionality, and other topics. Integrated Writing course. CR Lecture/Lab

MUE4670 4670 Pep Band MUE Music: Ensembles 1 Perform jazz, rock, and contemporary music at all home basketball games and for other campus activities. Audition required. CR Lecture

EED3100 5310 Devices and Circuits EE Electrical Engineering 3 Introduction to theory and application of electronic devices for discrete and integrated circuits. Fundamental necessary for comprehension and further study of modern microelectronics. CR Lecture/Lab

ECG3180 3180 PDN Seminar EGR Engineering 1 Ph.D. seminar course required of all students seeking the Ph.D. in Engineering. Graded pass/unsatisfactory. CR Reading

RWH3000 3840 Impact of HIV RHD Rehabilitation 3 Introduction to HIV and the populations impacted. Overview of the history, stereotypes and prejudices, and current intervention and treatment, and specific impact on subpopulation. CR Lecture/Lab

PSY2840 8240 Reasoning PSY Psychology 2 This course will provide an overview of problem solving theory in the context of laboratory, academic and workplace tasks. Upon completion, students will be able to evaluate fundamental research to support the analysis of complex workplace cognition for Department Management. CR Lab

CSC4260 4260 Micro-Computers CS Computer Science 3 Numerical linear algebra survey using high-level computing tools. Topics include linear equations, matrix factorizations, eigenvalue problems, least squares, applications of singular value decompositions, and dissolve methods for large sparse matrices. CR Laboratory

ART1000 7000 Orthopaedic Anatomy ART Athletic Training 3 Comprehensive review of the musculoskeletal system anatomy and its related structures, specifically the spine, shoulder, elbow, wrist and hand, hip and pelvis, knee and ankle. Course will engage cadaver anatomy. CR Laboratory

CSC4060 4260 Database I CS Computer Science 1 Basic principles of biochemistry and molecular biology of the cells at the molecular level. Emphasizes experimental procedure used to generate current understanding of the biochemistry of proteins and nucleic acids. CR Lecture

ME1120 1120 Fund of Engineering Desg ME Mechanical and Materials Engrg 1 Introduction to the principles and practice of mechanical and materials engineering design. Fundamental design philosophy using a hands-on approach, such as the project-based approach. CR Laboratory

MIB7770 7770 Gene Therapy MI Microbiology & Immunology 3 The molecular basis of gene therapy and the use of viral gene delivery systems for the treatment of human disease are examined. Gene therapy strategies are contrasted with various diseases, including cancer and AIDs. CR Lecture/Lab

THD1450 3450 Acting II TH Theatre 3 Training in approaches to a range of plays by playwrights from the early and late modern period such as Ibsen, Chekov, Shaw, Williams, Miller and Offen and others. Emphasis on understanding the acting strategies used, models applicable to organizational and industrial situations. CR Laboratory

MBM2410 2410 Bioskos and Biotan SBB Bioskos & Molecular Biology 3 Basic principles of biochemistry and molecular biology of the cells at the molecular level. Emphasizes experimental procedure used to generate current understanding of the biochemistry of proteins and nucleic acids. CR Lecture

AKT7110 7110 Human Gross Anatomy ART Anatomy 3 An examination of the competencies required of small business managers including balancing financial and marketing responsibilities, and emphasizing competitiveness. (Also listed as BMS 570) CR Lecture/Lab

NEB4300 6430 Aeronautics ME Mechanical and Materials Engrg 3 Glider history. Standard atmospheres, basic aerodynamics, theory of lift, performance principles, stability and control, and aerodynamics concepts for Department Management. CR Laboratory

CMG3210R 3510R Physical Chr Lab & Recitation CHM Chemistry 0 Required recitation for 3510. Integrated Writing course. CR Recitation

CHM8320 7630 Analytical Separations CHM Chemistry 3 Theory of separation techniques are reviewed. The two techniques of gas and liquid chromatography are discussed with emphasis on column technology, inlet systems and detection devices. CR Laboratory

CSE2410 2410 System Administration CEG Computer Engineering 3 Install and securely configure and maintain a modern server-based operating system while incorporating ethical practices in system administration. Includes setting up user accounts, configuring authentication and directory service policies, configuring audit logs, and managing virtual machines and core network services for Department Management. CR Laboratory

ECO5100 4100 Labor Economics EC Economics 3 A study of labor market behavior and wage determination, addressing the impact of new technologies, global competition, and deindustrialization on American labor markets. CR Lecture/Lab

BMG1450 4190 Intro-Ligno-Lubrication ME Mechanical and Materials Engrg 3 Suffix of various lubrication regimes where mechanical elements in sub-automotive, heavy machinery, wind turbine applications operate; introduction to the fundamental theory of lubrication with an emphasis on the application of dynamic loadings. CR Lecture/Lab

PSY1080 9060 Multivariate Methods PSY Psychology 4 Issues in multivariate analysis are reviewed using statistical software packages. These issues include path analysis, principle components analysis, confirmatory factor analysis, and structural equation models. CR Lecture/Lab

DAN2400 4340 Music Theatre Dance III DAN Dance 3 Advanced group classes applying Ballet, Jazz and Modern Dance techniques to Musical Theatre Dance. CR Lecture/Lab Combination

NUR4640 4460 Long Night To Prof Th I NUR Nursing 10 Facilitates the transition from student to professional nursing role through concentrated experience in selected clinical areas. Integrated and leadership concept. CR Lecture/Lab

WNH 1770 Water Safety Instruction KNH Knowledge & Health 1 National American Red Cross standards training for teaching American Red Cross Swimming and Diving and Water Safety courses. CR Lecture/Lab Combination
The practicum provides significant opportunities for candidates to synthesize and apply the knowledge and skills identified in the district-level standards through substantial, sustained, standards-based work. Candidates, mentored by a middle grades teacher, shall assist in the planning, organizing, delivering, and assessing of instruction in a 4-9th grade setting applying pedagogical content knowledge in collaboration with an experienced mentor teacher.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Catalog</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Required</th>
<th>Lab</th>
<th>Grade</th>
<th>Time</th>
<th>Place</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>CEG4330</td>
<td>Required laboratory for CEG 4330. UG LB Lab</td>
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<tr>
<td>ECE4510</td>
<td>Introduces experimental methods needed to perform mechanical testing and the impact of microstructure on the mechanical properties of materials. Formal lab reports.</td>
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<tr>
<td>CHM4350L</td>
<td>Advanced synthesis and characterization of representative inorganic compounds. UG LB Lab</td>
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<tr>
<td>P&amp;N6990</td>
<td>Proficiency with general laboratory and measurement techniques, knowledge of physical sensors and data reduction techniques. Application to simple physical systems.</td>
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<tr>
<td>IT2210</td>
<td>Web Theory &amp; Design II</td>
<td>IT Information Technology</td>
<td>2</td>
<td>Production will move beyond the basics, adding form objects and other enhancements using web design software. 2 hours lecture/2 hours lab.</td>
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<tr>
<td>INE2030</td>
<td>Sim of Thermal-Fluids</td>
<td>ME Mechanical and Materials Eng</td>
<td>3</td>
<td>Commercial computational fluid dynamics software is used to solve practical engineering problems, including fluid, heat and mass transfer.</td>
<td>Undergraduate level ME 3200 Minimum Grade of D or Undergraduate level ME 3200 Minimum Grade of D or Undergraduate</td>
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<tr>
<td>PSY4080</td>
<td>Advanced treatment of the concepts and techniques of international financial management.</td>
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<tr>
<td>IT2240</td>
<td>Fundamentals of Webpage Design</td>
<td>IT Information Technology</td>
<td>3</td>
<td>Creating a webpage for the purpose of communicating or promoting an idea by evaluating the effectiveness of a webpage using visitor comments and web analytics.</td>
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</table>
This course studies, in both English and Spanish, fundamental concepts of doing business, managing and marketing in Latin America. Examines cultural, institutional and behavioral and management factors that influence business practices.

**Music**

- MUS7720 3870 Music Technology
- MUS3610 3610 Orchestration
- MUS4030 4030 Conducting

This course examines curriculum, materials, and teaching methods for secondary mathematics teaching. This includes course development, assessment, differentiation, technology, and content for various mathematical topics.

**Anthropology**

- ANTH 4890 4890 Special Topics in Anthropology
- ANTH 4920 4920 Independent Study in Anthropology

Intensive study of selected undergraduate-level topics in Biological or Medical anthropology. Topics vary; may be repeated for credit.

**Computer Science**

- CS5260 5260 CS Numerical Methods
- CS 1160 1160 Introduction to Computer Science (part 1)

Topics will vary. Current media coverage of biochemistry and molecular biology related events, popular literature, or other special interest topics related to biochemistry and molecular biology.

**Soccer: Outdoor**

- KINES 4006 4006 Fundamental Skills and Knowledge of Soccer: Outdoor

The rise and evolution of Paleozoic vertebrate and plant groups with an emphasis on the evolution of jawed fishes, early tetrapods, and the 'terrestrialization' of Earth. Phylogenetic and molecular studies of the vertebrate fossil record from the Cambrian to the recent past. The role of paleobiology in the development of evolutionary theory.

**Swimming: Beginning**

- KINES 2040 2040 Fundamental skills and knowledge of Swimming: Beginning. Competency-based approach. Course may accommodate disabled students when appropriate.

Assessment in Music Education is designed to evaluate various methods of assessment in education. Students will work with assessment data to evaluate teaching effectiveness, student learning, and assessment validation.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor</th>
<th>Credits</th>
<th>Department</th>
<th>Type</th>
<th>Co-requisites</th>
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<tbody>
<tr>
<td>MUS3310</td>
<td>Orchestra Music Ed Meth</td>
<td>MUS</td>
<td>3</td>
<td>Music</td>
<td>UG</td>
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<td>DMV3010</td>
<td>DMV Registration</td>
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<td>DMV Consortium</td>
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<tr>
<td>ENGL3030</td>
<td>Studies in American Lit</td>
<td>ENG</td>
<td>3</td>
<td>English</td>
<td>UG</td>
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<tr>
<td>EDLD3040</td>
<td>Coaching &amp; Mentoring</td>
<td>EDL</td>
<td>3</td>
<td>Educational Leadership</td>
<td>UG</td>
<td>Lecture</td>
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<tr>
<td>BIOL4000</td>
<td>Senior Honors Research Bio</td>
<td>BIO</td>
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<td>Independent research work</td>
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<td>Lecture</td>
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<td>ENGL4010</td>
<td>AHA-LA Methods</td>
<td>ENG</td>
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<td>Education</td>
<td>UG</td>
<td>Lecture</td>
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<tr>
<td>SPMT5090</td>
<td>Facilities &amp; Event Mgt</td>
<td>SPM</td>
<td>7</td>
<td>Sport Management</td>
<td>UG</td>
<td>Seminar</td>
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<tr>
<td>ECOS3040</td>
<td>Development of ec thought &amp; philo</td>
<td>EC</td>
<td>3</td>
<td>Economics</td>
<td>UG</td>
<td>Lecture</td>
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<tr>
<td>FLS6860</td>
<td>Model United Nations Sem</td>
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<td>Political Science</td>
<td>UG</td>
<td>Seminar</td>
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<td>FAS2020</td>
<td>Intro Food Science Lab</td>
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<td>Food and Agricultural Systems</td>
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<td>Seminar</td>
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<td>PSY4100</td>
<td>Psychology Capstone</td>
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<td>4</td>
<td>Psychology</td>
<td>UG</td>
<td>Seminar</td>
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<td>EES4020</td>
<td>Elec Applications of EES</td>
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<td>Earth &amp; Environmental Sciences</td>
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<td>EDLM6800</td>
<td>Soc &amp; Pop Contexts</td>
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<td>EDL Lecture</td>
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<td>Seminar</td>
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<tr>
<td>ME4880</td>
<td>Powder Processing of Mat</td>
<td>ME</td>
<td>4</td>
<td>Mechanical &amp; Materials Eng</td>
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<tr>
<td>PLST3700</td>
<td>Human Rights in USA</td>
<td>PLS</td>
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<td>KINH1075</td>
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<td>KIN HIVI &amp; Health</td>
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<td>Career Assessment</td>
<td>RHBM</td>
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<td>Rehabilitation</td>
<td>UG</td>
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<td>EBME4010</td>
<td>Topics in EBM</td>
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<td>Biochemistry &amp; Molecular Biology</td>
<td>UG</td>
<td>Seminar</td>
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<td>EDC7150</td>
<td>Digital Prof Development</td>
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<td>Instructional Design &amp; Learning</td>
<td>UG</td>
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<tr>
<td>ENGR1050</td>
<td>Class Comm for ITX</td>
<td>ENGR</td>
<td>2</td>
<td>Engineering</td>
<td>UG</td>
<td>Lecture</td>
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<tr>
<td>FWS6800</td>
<td>Transitions Stu w/Except</td>
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<td>Education - Special Education</td>
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<td>Lecture</td>
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<td>CSE8630</td>
<td>Systems Simulation</td>
<td>CSE</td>
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<tr>
<td>PHY1005L</td>
<td>How Things Work Lab</td>
<td>PHY</td>
<td>10</td>
<td>Physics</td>
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<td>Lab</td>
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<tr>
<td>EEIT9990</td>
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<td>7</td>
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<tr>
<td>SOCIO110</td>
<td>Sociology of Gender</td>
<td>SOC</td>
<td>3</td>
<td>Sociology</td>
<td>UG</td>
<td>Course must be taken concurrently with SOCIO 2100</td>
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<td>FR6800</td>
<td>Fan Occupation Films</td>
<td>FREN</td>
<td>3</td>
<td>French</td>
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<tr>
<td>PSG4050</td>
<td>Mind &amp; Environment Capstone</td>
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<td>Psychiatry</td>
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<td>EED3400</td>
<td>Classroom Management P-5</td>
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<td>Elementary Education - P-5</td>
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<td>BFET131</td>
<td>Medical Ultrainsics</td>
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<td>Research Methods</td>
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<td>URST905</td>
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<td>KIN HIVI &amp; Health</td>
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<td>Advanced Thermodynamics</td>
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<td>SOCIO550</td>
<td>Criminology</td>
<td>SOC</td>
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<td>PSY1530</td>
<td>Methods in Clinical Psy</td>
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<td>3</td>
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<tr>
<td>BMHE4000</td>
<td>Molecular Biology of RNA</td>
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<td>Biomedical Engineering - Unit 1</td>
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<td>Lecture</td>
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<td>BME3940</td>
<td>Biomed Eng Internship</td>
<td>BME</td>
<td>4</td>
<td>Biomedical engineering</td>
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<td>SAAT800</td>
<td>Intro Stu All Higher Ed</td>
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<td>Student Affairs - Higher Ed</td>
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<td>SWH410</td>
<td>Social Work Practice II</td>
<td>SW</td>
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<td>Social Work</td>
<td>UG</td>
<td>Lecture</td>
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Note: The table above includes course codes, course names, instructors, credits, departments, types, and co-requisites for various courses. The courses are grouped by department for easier navigation. The table also indicates whether the course is a lecture, seminar, combination, or lab, and provides additional information such as prerequisites and special notes.
Lecture
This course will focus on how and why animals behave the way they do. In particular, we will study how an individual's behavior contributes to its survival and reproductive success (i.e., why do...
Intensive clinical focus provides students the opportunity to apply relevant theories, concepts, and research findings to clinical care. Stresses development of clinical competence required in delivering care. CEG NUR8860 Development of composition skills using famous Chinese writings as guided examples of grammar and techniques. Taught in Chinese. If prerequisite not met, contact instructor for permission. This course prepares students to manage small to medium sized health promotion and education projects within a public health organization. The course covers measuring program performance and impact; leading teams; exploring project management tools; fundamentals of human resources; building and maintaining partnerships (collaboratives) and coalitions; and identifying and securing funding, and financial management of programs. NUR 7712 Viral Med & Social Media MKT Marketing This course focuses on theory, application and practice associated with viral marketing activities. Goals for students are 1) identify the major components of a viral marketing campaign 2) understand how the viral marketing approach is being used strategically by advertisers and marketers 3) understand the psychological motivations associated with content sharing (RIRM). MTH 4420 Archaeology of Conflict ATH Anthropology Discussion of large scale forms of conflict of the past 500 years such as warfare, structural violence, and state terrorism, as well as archaeological excavations and theories that describe and explain them. Integrated Writing course. MUS 2010 Theory of Music II MUS Music Continuation of MUS 1010 and 1020. Part-writing, analysis, and harmony on a more advanced level. EE3000 Microbiology & Immunology 3 Essential physical parameters of solids: elastic; elastic-thin film properties (i.e. MEMS devices); electromechanical, piezoelectric and ferroelectric properties; paramagnetism and ferromagnetism; electron transport properties (metals and semiconductors); electronic bandgap and bandgap engineering; and the essential role of crystalinity in engineering desired phenomena (i.e. dielectric material in MEMS and ferromagnetic material in MEMS). BME7890 7890 Continuing Registration BME Biomedical & Molecular Biology Continuing registration for advanced degree. BMD3490 3490 Survey of Research COM Communication 3 Introduction to the behavioral approach and current theories and experiments in communications research. Integrated Writing course. BME4620 4620 Theory of Statistics STT Statistics Introduction into the use of advanced model-based computer simulations for exploring the effects of various types of stimuli on behavior and behavior related processes. Topics include exploratory and confirmatory factor analysis. EEDT7712 7712 Adv Model-Based Sys Analysis HE Industrial & Human Fac Eng 3 Communication-intensive seminar integrating knowledge on selective visual attention. GR SE Seminar.
Spring 2023 777020 7560 Biostat Consulting STT Statistics
 2 Consultation with clients on biostatistical issues, under the direct supervision of a professional statistical consultant. Students may accommodate disabled students when appropriate. UG LE Lecture

Spring 2023 935800 4850 Approaches to History HST History
 3 Examine approaches to the study of history and historical methodology. Topics vary (e.g., History and Theory). Integrated Writing course. UG LE Lecture

Spring 2023 757300 3530 Undergraduate Remedial Rhino BMG Biological & Molecular Biology
 2 Undergraduate remedial classroom experience for students with disabilities. Topics vary. UG LE Lecture

Spring 2023 554500 1560 Intro to Quantum Computing CS Computer Science
 5 Introduction to Quantum Computing (QC). Course covers QC terminology, short introduction to quantum mechanics, linear algebra for QC, QC classes and algorithms, quantum cryptography, quantum error correction, quantum gates, quantum algorithm design, quantum algorithms, and Deustech-Jamay's Simon's, Grover's and Shor's algorithms, and the potential of quantum computer applied to NLP and financial problems, code-breaking, and potential quantum computer problems. Student understanding of an expanded quantum computer will be required. UG LE Lecture

Spring 2023 554500 4350 Intro to Quantum Computing CS Computer Science
 5 Introduction to Quantum Computing (QC). Course covers QC terminology, short introduction to quantum mechanics, linear algebra for QC, QC classes and algorithms, quantum cryptography, quantum error correction, quantum gates, quantum algorithm design, quantum algorithms, and Deustech-Jamay's Simon's, Grover's and Shor's algorithms, and the potential of quantum computer applied to NLP and financial problems, code-breaking, and potential quantum computer problems. Student understanding of an expanded quantum computer will be required. UG LE Lecture

Spring 2023 554500 6260 Document Design ENG English
 3 Instruction and introduction in designing effective print and online documents. Students may accommodate disabled students when appropriate. UG LE Lecture

Spring 2023 554500 9035 Psychology PSY Psychology

Spring 2023 554500 9390 Theatrical Production Theatre Theatre
 2 An introduction to the theory and practice of theatrical production, with an emphasis on production design and design techniques, production management, and stage craft. UG LE Lecture

Spring 2023 554500 9390 Theatrical Production Theatre Theatre
 2 An introduction to the theory and practice of theatrical production, with an emphasis on production design and design techniques, production management, and stage craft. UG LE Lecture
Multidirectional interactions between the nervous and immune systems have been documented in homeostasis and pathologies ranging from multiple sclerosis to autism, and from leukemia to acute

Fundamentals of gas flow in the subsonic to supersonic flow regimes. Wave propagation in compressible medium, one-dimensional isentropic flow with area change, frictional effects, and heat transfer

Economic analysis in a policy and planning context. Interdisciplinary approach to analyze the economics of location, inter-regional trade, regional development, urban regions, and growth strategies.

Focus on the anthropological study of political life cross-culturally. Presents evolutionary and historical approaches to political institutions, and classic anthropological analyses of political institutions.

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Theories and applications of computer processing of seismic reflection data. Deals with seismic data formats, seismic data manipulation, filtering, velocity analysis, stacking and migration, and in both land and marine contexts. Hands-on experience with industry-standard software packages.

A study of selected fixed food processes and the underlying principles behind their operation.

Causal and related materials on the Bill of Rights and the Fourteenth Amendment with an emphasis on First Amendment freedoms of speech, of the press, and of religion, and their impact on the development of the relationship between government and religion in the United States.

Focuses on the governmental system of the United States with special attention to development, social structure, legal status, electoral processes, and fiscal problems. Integrated Writing course.

Continuation of MUS 1010 and 1020. Part-writing, functional language, a functional language, and a multi-paradigm scripting language. Basics of interpreters and compilers are explored through programming assignments.

Econometric and econometric analysis of political institutions. Investigates recent developments in the study of politics as a contemporary problem.

Theory and the application of the use of antigens and antibodies in blood grouping and transfusion medicine.

Practical applications and issues in research; research design and methodology, sampling techniques, instrument development, proposal writing, and the application of skills through a research project.

Introductory course providing students with a general control background. Major topics include block diagrams and signal-flow graphs, electromechanical modeling, time response, root locus, and design of PID controllers.

Supervised individual readings on selected topics arranged between student and faculty member directing the study. Requires 3.0 GPA. Integrated Writing course.

A lecture course providing an introduction to the anthropological study of political life cross-culturally. Presents evolutionary and historical approaches to political institutions, and classic anthropological analyses of political institutions.

Organization and functions of the government of Ohio with special attention to development, social structure, legal status, electoral processes, and fiscal problems. Integrated Writing course.

Aims to provide an introductory understanding of legal issues related to computer ethics, covering topics such as ethical decision-making, professional responsibility, and social implications.

Focuses on the governmental system of the United States with special attention to development, social structure, legal status, electoral processes, and fiscal problems. Integrated Writing course.

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Sociology courses, community work, and policy making.

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This course covers trade theories, commercial policy, and theories of international investment and migration, theories of exchange rate determination and open macroeconomics. Special attention is

Examination of the principles of General Chemistry II through experimentation.

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This course will explore the organization, function, and structures of eukaryotic cells. Fundamentals of subcellular organization, and biological chemistry will be provided to build a foundation for understanding the molecular and energetic aspects of the cell. The course will cover cell membrane function as well as cellular signaling pathways with a particular emphasis on understanding how these pathways are useful targets of pharmaceutical development.

Chiara Murray 1060L 1060L Chemistry: Materials Lab CHM Chemistry 0

Intro to Cell Biology PTX Pharmacology/Toxicology 0

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Lab work uses tools such as nmap and BackTrack Linux. Required laboratory for CIE 1060. Lab

CIE 27210 7210 Engineering Mechanics of Composites ME Mechanical and Materials Eng 3

Aerospace Medicine MIE Mechanical and Materials Eng 4

Aerospace Skills for Healthcare Providers is intended to provide an introduction to flight time (pilot) operational aeromedical knowledge/skills and pertinent aeromedical concepts it provide to the student in the relevant medical environment. Lab

PTY 4802 4802 Jazz Band MUE Music: Ensembles 3

A jazz performance-oriented group. Students learn elements of ensemble execution, professionalism, jazz history, jazz theory, and improvisation. Audition required.

Chiara Murray 1060L 1060L Chemistry: Materials Lab CHM Chemistry 0

Intro to Cell Biology PTX Pharmacology/Toxicology 0

This course will explore the organization, functions, and structures of eukaryotic cells. Fundamentals of subcellular organization, and biological chemistry will be provided to build a foundation for understanding the molecular and energetic aspects of the cell. The course will cover cell membrane functions as well as cellular signaling pathways with a particular emphasis on understanding how these pathways are useful targets of pharmaceutical development. Required laboratory for CIE 1060.

Lab work uses tools such as nmap and BackTrack Linux. Required laboratory for CIE 1060. Lab
Spring 2023 MTH3200 2530 Elementary Linear Alg MTH Mathematics 3 Matrices and their operations, linear systems of equations, Gaussian elimination, determinants, geometry of Euclidean space, vector spaces and subspaces, linear independence, basis, dimensions and rank, orthogonality and the Gram-Schmidt process, linear transformations, eigenvalues and eigenvectors, and diagonalization.
This course is an introduction to the basic concepts of biostatistics and the skills necessary to interpret data for research and evidence-based practice in the health sciences. The focus of this course is on understanding the appropriate application of biostatistics and the interpretation of findings.
Spring 2023:

PIS4505 4530 Politics of Russia PLS Political Science 3 Examines the political life in Russia and the former Soviet Union, with an emphasis on the legacy of communism and the role of economics and politics in the transition to democracy. Integrated Writing Course

IS5605 7800 Independent Study HUM Humanities 1 Individual study in the humanities under the direction of a faculty supervisor. Generally requires regular conferences with supervisor and research writing. GR IS Independent Study

PSY5465 9045 Bayesian Analysis PSY Psychology 3 This course is an introduction to applying Bayesian data analysis. We will cover the necessary probability theory to understand Bayes’ rule and to derive posterior distributions for simple models. We will discuss MCMC approaches, estimation procedures including Gibbs sampling and the basics of Hamiltonian MCMC. In the latter half of the course, we will explore the implications of random variations of generalized linear models, ranging in complexity from a linear to hierarchical ordinal regression GR LE Lecture

RHE4800 8850 Rehab-Counseling Pract RHE Rehabilitation 3 Demonstrate basic skills, techniques and competencies learned in previous coursework while delivering rehabilitation counseling services to consumers. The practicum experience is determined individually by the student, given the university’s consent for student practice. In consultation with the supervisor, the student presents a brief summary of the practicum experience. LE PR Practicum

PSY2700 7950 Sec. Sys. & App. SW SÄD PSC Prof. Psychology Cyber Security 3 Introduces implementing software security with software engineering best practices, fundamental tenets of security doctrine, and the incorporation of security throughout the software development lifecycle. Preparatory work for the theoretical and objective risk analysis and testing. GR LE Lecture

EOL5905 9555 Independent Practicum EOL Educational Leadership 3 Provide experience in school leadership and administration at the district level. Candidates perform administrative tasks under the supervision of a licensed school district administrator. GR PR Internship

SPN2220 2220 Iner Sin Fp It Medical SPN Spanish 3 Intermediate level Spanish course with service component. Grammar, vocabulary, oral and written communication skills, cultural sensitivity training in the context of the medical profession. Pre-requisites: Undergraduate level SPN 1010 and minimum Grade of D in Undergraduate level SPN 1010

BMM9000 6200 Research Perspectives BMS Biochem & Molecular Biology 3 Lecture/meeting course to acquaint new graduate students with the research being carried out by the faculty in the Biochemistry and Molecular Biology program. GR LE Lecture

CTE3600 6000 Pre-Serv. Worksho for CTE CTE Career and Technical Education 6 For beginning CTE teachers with occupational experience and limited or no formal training in an education setting. Explores teaching pedagogy, knowledge and skills required for new role as CTE educator. LE PR Practicum

ESS5400 4600 Limnology EES Earth & Environmental Sciences 3 Study of the morphological, physical, chemical, and biological characteristics of lakes, bays, and wetlands. Includes one week of lecture on main campus and one week of field study in northern Wisconsin. GR LE Lecture

ME2120 2120 Statics ME Mechanical and Materials Eng 3 Forces, resultant, components, equilibrium of particles, equilibrium of rigid bodies, centroids and centers of gravity, analysis of structures, friction, and moments of inertia. Pre-requisites: Undergraduate Managed Prerequisite(s): Undergraduate level EGR 1010 Minimum Grade of D or Undergraduate level EGR 2010 Minimum Grade of D or

BID4470 4470 Pop and Comm Ecology BIO Biology 3 Use of deterministic and stochastic models to characterize populations and quantitative methods for analyzing community structure, composition, and dynamics. LE LE Lecture

GRM530 4530 Readings Greek Rel Bng GRI Greek 3 Herodotus, Thucydides, Xenophon, Polybius, and Ptolemy. Topics include methods of composition, influences on historiography from the sophists and philosophers, the development of Greek historical writing, and epistolary evidence from inscriptions and other literary sources. Topic may be varied. LE LE Lecture

NNR8830 8830 Diploma Leadership Practicum NUR Nursing 2 In this course collaboration with faculty and mentors, students design an experience to facilitate application of knowledge gained in prior courses: theories and research related to information, population health, health policy, finances, and leadership. Specifically, students will explore the role of the nurse leader in promoting leadership and nurse empowerment.

BMM9000 8850 Non-Direct Rnch in BME BME Biomedical Engineering 1 MSV Pre-requisites: Undergraduate level MTH 1350 or 2300 with minimum Grade of C. Prerequisite: Undergraduate level BME 3511 Minimum Grade of C in Undergraduate level BME 3511. GR PR Practicum

SPPN6130 6130 SPN Practicum II SPN Spanish 1 Peer teacher observer and assist in daily and/or intermediate level classes, continue to participate in practicum from SPN 6110 or Undergraduate Managed Prerequisite(s): Undergraduate level SPN 6110 Minimum Grade of D in Undergraduate level SPN 6110

KHN7650 7650 Adv. Athletic Training Trc KNH Knowledge & Health 3 Examination of trauma, concussions, herniation, sprains, strains, fractures, open wounds, and dislocations. GR PR Practicum

MTH5230 5230 Complex Variables MTH Mathematics 3 Operations with complex numbers, derivatives, holomorphic functions and the Cauchy-Riemann integrals. Explore how the Cauchy Integral and C. Inversion can be used to get a better understanding of complex numbers. Pre-requisites: Undergraduate level MTH 3320 Minimum Grade of C in Undergraduate level MTH 3320

BMM9000 7650 Systems Biology BMS Biochem & Molecular Biology 3 This course will describe current state of the art experimental and analytical techniques in the area of systems biology. The covered topics include genomics, proteinomics, RNA expression, metabolomics and molecular ecology. LE LE Lecture

EDC3190 3190 MCD Soc. Studies C & M ED Education 3 Course focuses on principles, trends, technology, critical thinking skills, and historical and social science research for middle school social studies. In this course, students will also focus on teaching in the multicultural classroom.

PTX1110 1110 Journal Club PTX Pharmacology/Toxicology 1 WSU faculty directed course. Students present their current literature in advance of the meeting and the audience will give presentations on the material.

ME2787 7877 M-TY Student Advised MBA MBA 1 Faculty supervised short-term study abroad. Students will be designing readings about the economy, culture and business climate of the country to be toured. Students will also bring back a business analysis of firms to be visited on the tour. In consultation with the instructor, students will prepare a written report on a topic relevant to the tour. GE SEM Seminar

IT2220 2220 Publication Design IT Information Technology 3 Introduce current print media environment and unique challenges encountered with communication for books, magazines, newspapers, promotional literature, and other types of print material. Pre-requisites: Undergraduate level IT 1400 Minimum Grade of D or

PSI4180 4180 PSY Capstone Topics PSY Psychology 4 A selected psychology capstone topic. Topics vary. LE LE Lecture

MIS5220 5220 IT Management Information Systems MIS Management Information Systems 3 Introduce Information Technology infrastructure including background, types, pre-applications, and components of telecommunications, networks design, and distributed information systems. Emphasize telecommunications technology and its impact on information systems and business operations.

EAM4100 4100 Jazz/Theatre Dance II DAN Dance 2 Diversified styles and techniques of advanced jazz/theatre dance. Emphasis on the continued development of advanced rhythms, syncopation, coordination, musicality, and variations of style. ST ST Studio

KHN6000 6000 First Aid and CPR KNH Knowledge & Health 2 Standard Red Cross first aid course. Comprehensive study of first aid techniques and procedures in emergency treatment. LE LE Lecture

CEG3710 3710 E-Learning Software Testing CEG Computer Engineering 3 This course introduces software testing strategies and established best practices for testing software in a systematic manner. Focus is on planning, writing, and executing a software test plan along with various types of testing techniques. Pre-requisites: Undergraduate level CEG 2100 Minimum Grade of D or

BME3511 3511 Biowebotics I Laboratory BME Biomedical Engineering 0 Required laboratory for BME 3511. LE Lab

BNE3512 3512 Bioinformatics II BME Biomedical Engineering 4 Modern electronic devices/circuits applied to human systems / biomedical applications, instrumentation, data collection. Resilient components, filters, semiconductors, op-amps, digital logic circuits in biomedical applications and devices. Hands-on laboratory component provide experience in design, assembling, testing, and empowering pupils, filter, digital logic circuits used for collecting programmed data. Required laboratory for BME 3511. LE LE Lecture

PSY410 410 Group Psychotherapy Professional Psychology 3 Prevents background, development, and theory of small groups as well as effective leadership techniques and procedures for planning, conducting, and evaluating group interaction and progress. LE LE Lecture

EDL6500 6500 Org Dynamics EDL Educational Leadership 3 Focuses on the individual and the organization. The respective needs and expectations of each are investigated. Emphasis on interpersonal and organizational communication, group processes and conflict resolution, and collaboration for school improvement. LE LE Lecture

STT340 340 Elementary Statistics STT Statistics 4 Numerical and graphical methods for finding and summarizing important features of data. Principles of designing experiments for collecting data. Introduction to probability, confidence intervals and hypothesis testing introduction. Applications to means, proportion, two-sample comparisons, contingency tables, linear regression, and analysis of variance. Use of statistical computing package to explore mathematical models and illustrate concepts. LE LE Lecture

BMS3000 3000 Pth Biomedical Research BMS Biomedical Sciences 1 Principles of Biomedical Research is appropriate for students that will be involved in biomedical research. PBR provides a lecture and student interactive series designed to introduce students to the basics of biomedical research.

MBIO90 90 Microbiology Seminar HUM Microbiology & Immunology 1 Grade special permission. GE LE Seminar

PHL6140 6140 Logic and Critical Thinking PHI Philosophy 4 Survey of the important theories concerning the nature and justification of law, liberty, justice, responsibility, and punishment. Pre-requisites: Undergraduate level PHIL 3140 Minimum Grade of C in Undergraduate level PHIL 3140 or Undergraduate level PHIL 3140 Minimum Grade of D or

JOURNAL Club Journal Club (PSY) Journal Club (PSY) 1 Also listed as URS 4250. Study of selected urban problems and their relationship to the political environment. Use of simulation gaming to understand community development processes.

EDL3940 3940 Adv Coaching Mentoring EDL Educational Leadership 3 Advanced studies in developing school leaders’ essential knowledge, skills, and dispositions for effective coaching and mentoring focused on improving teaching and learning. LE LE Lecture

HCE2100 2100 Adv Eng RM HIE Industrial & Hum Fac Engr 3 Design of workstations and hand-tools using physiology and biomechanics approach. Ergonomic analysis of assembly, machining and manual material handling operations. Practical solution and real world case studies to improve productivity and reduce workers compensation costs. Pre-requisites: Undergraduate Managed Prerequisite(s): Graduate level HIE 5310 Minimum Grade of D or

FRP2030 3320 Francophone African Studs FREN French 3 Introduction to the culture and literature from French-speaking Africa. Taught in French. Integrated Writing Course. Pre-requisites: Undergraduate Managed Prerequisite(s). Undergraduate level FR 3100 Minimum Grade of D or