

Ohio State Lima

Course Offerings Bulletin 2023-2024

Important Dates and Deadlines

registrar.osu.edu/registration/index.asp



THE OHIO STATE
UNIVERSITY

LIMA

Accounting and Management Information Systems 1

Accounting and Management Information Systems

2200	Introduction to Accounting I	U	3
Preparation and use of accounting reports for business entities; focus on uses of accounting for external reporting, emphasizing accounting as a provider of financial information. Prereq: Econ 2001.01 (200), or equiv. Not open to students with credit for 2000 (310) or 211, or equiv. This course is available for EM credit.			
2300	Introduction to Accounting II	U	3
The uses of accounting reports by managers to make business decisions and to control business operations; focus is on the internal use of accounting information. Prereq: 2200 (211) and Econ 2001.01 (200), or equiv. Not open to students with credit for 2000 (310) or 212, or equiv. This course is available for EM credit.			
3300	Cost Accounting	U	3
Managerial decision making in organizations with an emphasis on the use of financial data; theory and practice of management control. Prereq: 2300 (212), BusMgt 2320 (330), 2321 (331), and BusMHR 2292 (BusAdm 499.01); or permission of instructor. Not open to students with credit for 525.			
3601	Introduction to Information Systems	U	1½
The role of information systems in capturing and distributing organizational knowledge and enhancing management decision making, process of redesigning organizations utilizing systems analysis and design, quality assurance, and change management techniques, technical foundation of information systems, including hardware, software, telecommunications, networks, and the information architecture. Prereq: Admission to BSBA program and Business Management specialization.			

African American and African Studies

1101	Introduction to African American and African Studies	U	3
Introduction to the scholarly study of the Africana experience, focusing on patterns of resistance, adaptation, diversity, and transnational connections. Prereq: English 1110. GE soc sci indivs and groups course. GE foundation social and behavioral sci and race, ethnicity and gender div course.			
2270	Introduction to Black Popular Culture	U	3
A critical analysis of the commodity production and consumption of black popular culture products, such as fashion, film, urban fiction, music, vernacular expression, television and advertising. GE VPA and diversity soc div in the US course. GE foundation lit, vis and performing arts and race, ethnicity and gender div course.			
2281	Introduction to African-American Literature	U	3
A study of representative literary works by African-American writers from 1760 to the present. Prereq: English 1110, or equiv. Not open to students with credit for English 2281. GE lit and diversity soc div in the US course. GE foundation lit, vis and performing arts and race, ethnicity and gender div course. Cross-listed in English.			
3310	Global Perspectives on the African Diaspora	U	3
Study of historical processes, key figures and ideas, and cultural expressions of the worldwide dispersion of people of African descent from different times and places. GE theme lived environments course.			

Agricultural Systems Management

2305	Professional Development I	U	2
Business communications and professional development in agricultural systems management including job search strategies, informative and persuasive writing, academic planning, collaboration, project documentation and reporting, and presentations. Prereq: English 1110. Not open to students with credit for ConSysM 2305. This course is available for EM credit.			

American Sign Language

1101	Elementary American Sign Language I	U	4
Students develop elementary ASL skills-receptive (listening) and expressive (speaking). American deaf culture and history introduced with an emphasis on making comparisons and connections to one's own culture. Instruction primarily in ASL. Not open to native users of ASL. Prereq: Not open to students with 2 or more years of ASL study in high school. Not open to students with credit for 101, English 101, or EduTL 101. This course is available for EM credit. GE for lang course. GE world languages course.			
1102	Elementary American Sign Language II	U	4
Further development of ASL skills. Focus on talking about others. Continued exploration of American deaf culture and history. Instruction primarily in ASL. Not open to native users of ASL. Prereq: 1101 (101), English 101, or EduTL 101. Not open to students with credit for 102, English 102, or EduTL 102. This course is available for EM credit. GE for lang course. GE world languages course.			

1103	Intermediate American Sign Language	U	4
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Advanced development of ASL skills. Focus on talking about community. Continued exploration of American deaf culture and history. Instruction primarily in ASL. Not open to native users of ASL. Prereq: 1102 (102), English 102, or EduTL 102. Not open to students with credit for 103, EduTL 113, or SphHmg 103, or equiv. This course is available for EM credit. GE for lang course. GE world languages course.

Anthropology

1101	Archaeology and Human Diversity, Lessons from the Past	U	3
Examines how power relations shaped racial, ethnic, and gender identities in ancient societies by examining archaeological sites like Tutankhamen's tomb, Stonehenge, Machu Pichu, and Great Zimbabwe and shows how these and other sites have been misrepresented in the media and misused by governments to promote racism and inequality. GE foundation race, ethnicity and gender div course.			
3623	Environmental Anthropology	U	3
Theory and ethnographic examples of human-environment interactions, focusing on the role of culture and behavior in environmental adaptation. Prereq: 2202 or equiv, or permission of instructor. Not open to students with credit for 5623. GE theme lived environments and sustainability course.			
5626	More: Culture and Economic Life	U G	3
An analysis of economic rationality in non-market and market societies; resource allocation, work organization, product disposition, exchange, money, trade, and development. GE theme citizenship for div and just wrld course.			

Art

2100	Beginning Drawing	U	3
Students will explore fundamental freehand drawing techniques with a range of drawing methods, media and concepts; emphasis on drawing from observation and expressive experimentation. Students will apply written, oral and visual communication skills as they evaluate, interpret and respond to significant works of art and their own expressive goals. This course is available for EM credit. GE VPA course. GE foundation lit, vis and performing arts course.			
2555	Introduction to Digital Photography and Contemporary Issues	U	3
Students will learn fundamental digital camera techniques and explore contemporary and historical issues in photography including the relationships between technique, concept, and aesthetics as well as the relationship between images, identity formation, and larger social structures. Prereq: Not open to students with credit for 3555. GE VPA course. GE foundation lit, vis and performing arts course.			

Arts and Sciences

1138.11	First-Year Seminar	U	1
Affords first-year students opportunities for contact with faculty in small group settings; introduction to academic areas, research, and frontier areas of scholarly pursuit. Prereq: Fresh standing or permission of instructor. Only one First-Year Seminar per semester allowed. Repeatable to a maximum of 2 cr hrs. This course is graded S/U.			
1138.12	First-Year Seminar	U	1
Affords first-year students opportunities for contact with faculty in small group settings; introduction to academic areas, research, and frontier areas of scholarly pursuit. Prereq: Fresh standing or permission of instructor. Only one First-Year Seminar per semester allowed. Repeatable to a maximum of 2 cr hrs. This course is graded S/U.			
1191	Non-Credit Internship	U	0
Internship conducted under the supervision of the employer; enrollment and evaluation coordinated by ASC Career Services. Student is responsible for finding the internship prior to the start of the term. Requires permission to enroll. Prereq: GPA 2.0 or above. Repeatable to a maximum of 4 completions. This course is graded S/U.			
2120	Information Search, Evaluation and Use	U	2
This seven-week course will help you develop skills and habits that will allow you to responsibly find, consume, create, and share information online. Among these habits is the creation of a search strategy, critical evaluation of online sources, and the use of copyrighted materials. We hope you leave this course as an intentional, reflective, and critical consumer of information.			
3191.01	For-Credit Internship	U	1 - 12
Internship conducted under the supervision of the employer; grade determined by ASC faculty member. Student must obtain the internship before the start of the term, and a signed learning agreement approved by faculty member and employer by first day. Enrollment in an academic department internship course is not permitted during the same term. Prereq: GPA 2.50 or above, and Soph standing or above. Repeatable to a maximum of 12 cr hrs or 4 completions. This course is graded S/U.			

Aviation

2 Aviation

2000	Introduction to the Aviation Industry	U	3
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Introduction to the aviation industry, including its elements, components, and structures. Topics include: aircraft, airports, airspace, a survey of industry segments and purposes, and careers and career paths.

2400	Fundamentals in Unmanned Aircraft Systems	U	3
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This course introduces the student to Unmanned Aircraft Systems, aircraft aerodynamics and aircraft performance, meteorology, operating within the National Airspace System, regulations, and use-cases of UAS (unmanned aerial systems). This course also provides exposure on UAS career paths, an overview of the various hardware and software that are important to the UAS landscape, and human factors.

Biochemistry

4511	Introduction to Biological Chemistry	U	4
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An introductory course in biochemistry dealing with the molecular basis of structure, metabolism, genetic replication, transcription, and translation in plants, animals, and microorganisms. Prereq: Chem 1220 or 1250, and 2510 or 2310, and one semester of Biological Sciences. This course is available for EM credit.

Biology

1101	Introductory Biology	U	4
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Basic principles of biology; topics include the nature of science, organismal diversity, evolution, ecology, genetics, reproduction, and cellular structure and function. Not intended students majoring in one of the biological sciences. Prereq: Not open to students with credit for 1101E, 1113 (113), 1113H (115H), 101, Entm1g1 1101 (101), or MolGen 1101 (PlntBio101). This course is available for EM credit. GE nat sci bio course. GE foundation natural sci course.

1102	Human Biology	U	4
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Exploration of human biology; topics include structure and physiological function, reproduction and development, genetics and disease, ecology, and evolution. Not intended for students majoring in one of the biological sciences. Prereq: Not open to students with credit for 102. This course is available for EM credit. GE nat sci bio course.

1113.01	Biological Sciences: Energy Transfer and Development	U	4
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Exploration of biology and biological principles; evolution and the origin of life, cellular structure and function, bioenergetics, and genetics. A broad introduction to biology comprises both Biology 1113 and 1114. Prereq: Math 1120, 1130, 1148, 1150, or above, or Math Placement Level L or M. Prereq or concur: Chem 1110, 1210, 1610, or 1910H, or permission of course coordinator. Not open to students with credit for 1113 or 1113.02. This course is available for EM credit. GE nat sci bio course. GE foundation natural sci course.

1113H	Biological Sciences: Energy Transfer and Development	U	4
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Exploration of biology and biological principles; evolution and the origin of life, cellular structure and function, bioenergetics, and genetics. A broad introduction to biology comprises both Biology 1113H and 1114H. Prereq: Honors standing; and Math 1149 or 1150 or above, or Math Placement Level L. Prereq or concur: Chem 1210, 1610, or 1910H, or permission of course coordinator. GE nat sci bio course. GE foundation natural sci course.

1114.01	Biological Sciences: Form, Function, Diversity, and Ecology	U	4
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Exploration of biology and biological principles; evolution and speciation, diversity in structure, function, behavior, and ecology among prokaryotes and eukaryotes. A broad introduction to biology comprises both Biology 1113 and 1114. Prereq: Math 1120, 1130, 1148, or 1150 or above, or Math Placement Level L or M. Prereq or concur: Chem 1110, 1210, 1610, or 1910H, or permission of course coordinator. Not open to students with credit for 1114 or 1114.02. This course is available for EM credit. GE nat sci bio course. GE foundation natural sci course.

1114H	Biological Sciences: Form, Function, Diversity, and Ecology	U	4
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Exploration of biology and biological principles; evolution and speciation, diversity in structure, function, behavior, and ecology among prokaryotes and eukaryotes. A broad introduction to biology comprises both Biology 1113H and 1114. Prereq: Honors standing; and Math 1149, 1150, or above, or Math Placement Level L. Prereq or concur: Chem 1210, 1610, or 1910H, or permission of course coordinator. GE nat sci bio course. GE foundation natural sci course.

3401	Integrated Biology	U	4
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A case studies approach is used to gain a better understanding of biological concepts and principles. This course is designed for biology majors. Prereq: 1113, 1114, Chem 1220, and Math 1140, or 1148 and 1149, or 1150 or above; or permission of instructor.

Business Admin: Finance

3220	Business Finance	U	3
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Introductory finance class which allows students develop the skills to understand how financial managers make value-maximizing decisions for their firms. Prereq: Econ 2001.01 (200), and 2002.01 (201), and AcctMIS 2200 (211). Prereq or concur: AcctMIS 2300. Not open to students with credit for 620, or to students enrolled in UUSS, UExp or PreBSBA-PR.

3500	Legal Environment of Business	U	1½
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An introduction to American legal institutions, sources of law, and an analysis of basic concepts of public and private law related to business decisions. Prereq: Soph standing. Not open to students with credit for 510, or to students enrolled in UUSS, UExp or PreBSBA-PR.

4200	Applications in Finance	U	3
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Applications in Finance with a discussion of Investment alternatives such as Money Market instruments, Stocks and Bonds and Corporate Finance issues such as Corporate Governance, Cost of Capital and Capital Budgeting. Prereq: 3220 (620), BusMgt 2320 (330), and 2321 (331). Not open to students with credit for 4210, 4211, 4212 (721), 4220, 4221, or 4222 (722).

Business Admin: Management & Human Rsrcs

2000	Introduction to International Business	U	1½
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Basic coverage of world trade and investment problems, and introduction to multinational corporation strategies and the various types of environments in which they do business. Prereq: Econ 2002.01 (201), and Econ 2001.01 (200) or AEDEcon 2001 (200). Not open to students with credit for BusAdm 555. Not open to students enrolled in UUSS, UExp or PreBSBA-PR.

2292	Business Skills & Environment	U	3
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Introduce the role of business in the lives of individuals, consumers, employees, and citizens. Focus on the concept of ethical leadership with emphasis on both oral and written communication skills for the business environment. Prereq: English 1110.01 or equivalent; and admission to the Business Administration major. Not open to students with credit for 2291. Not open to pre-business students.

3200	Managing Individuals in Organizations: Organizational Behavior and Human Resources	U	3
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Principles for managing the performance of individuals and groups in organizations; introduction to organizational behavior theory and its application to staffing, training, compensation, and appraisal. Prereq: Econ 2001.01 (200) and 2002.01 (201), or equivalent. Not open to students with credit for 3100 (400) or 701. Not open to students enrolled in UUSS, UExp or PreBSBA-PR.

4324	Staffing: Concepts and Competencies for Acquiring Talent	U	3
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Introduction to the scientific, legal, and administrative issues associated with the recruitment, hiring, and placement of individuals by organizations. Prereq: 2291 or 2292 (BusAdm 499.01); and 3200 (701), 4323 (653), and AcctMIS 2200 (211), 2300 (212), BusMgt 2320 (330), 2321 (331); or enrollment regional Business Management program. Not open to students with credit for 756.

4490	Strategic Management	U	3
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Introduction to the concepts and analytic tools in the field of strategic management to understand the competitive position of firms. Prereq: 2000 (BusADM 555), 2292 (BusADM 499.01), 3200 (701), and BusMGT 2320 (330), 2321 (331), 3230 (630), and BusFIN 3500 (510), 3220 (620), and BusML 3250 (650), 3380, and Sr standing in Business Administration major program. Not open to students with credit for BusAdm 799. Not open to students in UUSS, UEXP, or PREBSBA-PR.

Business Admin: Marketing & Logistics

3250	Principles of Marketing	U	3
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Presents the concepts, framework and tools of market-based management to deliver superior customer satisfaction, value and profitability. The focus of the course is on identifying, creating, delivering and measuring value creation. Prereq: Econ 2001.01 and 2002.01. Not open to students with credit for 3150 (650) or 450 or to students enrolled in UUSS, UExp or PreBSBA-PR.

3380	Logistics Management	U	1½
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Concepts and methods used to plan and manage logistics activities in a business environment. Understanding of the components of logistics management and tradeoffs required to manage the integrated flow of goods through the supply chain. Prereq: Econ 2001.01, or equiv.; and 2002.01, or equiv. Not open to students enrolled in UUSS, UExp, or PreBSBA-PR.

4204	Marketing Projects	U	3
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In this advanced marketing course students will act as a consulting team and work with a client firm on a marketing problem, produce a report and present their work. Prereq: 4201 (750), 4202 (758), and BusMHR 2292 (BusAdm 499.01), or equiv; or enrollment in regional campus General Business Program.

4380	Advanced Logistics Management	U	1½
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Advanced coverage of the concepts and methods used to plan and manage logistics activities in a business environment; in-depth understanding of the components of logistics management and tradeoffs required to manage the integrated flow of goods. Prereq: 3380, and AcctMIS 2200, 2300, and BusOBA 2320, 2321; and BusMHR 2291 or 2292.

Business Admin: Operations and Business Analytics

Business Admin: Operations and Business Analytics 3

2320 Decision Sciences: Statistical Techniques U 3

Examination of the use of statistical techniques in managerial decision-making processes; statistical inference, simple and multiple regression, time series. Prereq: Math 1131 or 1151, and Stat 1430, and CSE 1113 or 2111, and Econ 2001.01. Prereq or concur: Econ 2002.01. This course is available for EM credit.

2321 Business Analytics U 1½

Examination of the use of business analytic models used in managerial decision making processes. Emphasis on formulation and interpretation of models; supported by spreadsheet based software. Prereq: Math 1131 or 1151 or equiv., and CSE 1113 or 2111, and Econ 2001.01 or equiv., and Econ 2002.01 or equiv.

3230 Introduction to Operations Management: Improving Competitiveness in Organizations U 3

Introduction to operations and supply chain management to improve manufacturing and service organizations; analyzing, controlling and improving resources and processes to increase productivity, generate value-added output and meet business goals. Prereq: Econ 2001.01 or 2002.01, and Stat 1430 or equiv.; or Math 1151 or 1154, and enrollment in BSET program. Not open to students with credit for 3130, or to students enrolled in UExp or PreBSBA-PR.

4250 Six Sigma Principles U 3

Designed to familiarize students with the Six Sigma process improvement methodology and to provide them an opportunity to practice using Six Sigma Black Belt tools. Prereq: 2320, 2321, 3230, and AcctMIS 2200, 2300, and BusMHR 2292; or 3230, ISE 2040, and Stat 3440 or equiv., and enrollment in BSET program.

Chemistry

1110 Elementary Chemistry U 5

Introductory chemistry for non-science majors, including dimensional analysis, atomic structure, bonding, chemical reactions, states of matter, solutions, chemical equilibrium, acids and bases, along with topics in organic and biological chemistry. Prereq: Math 1073, 1074, 1075 or above; Math Placement Level L, M, N, or R; or ACT Math subscore of 22 or higher that is less than 2 years old. Not open to students with credit for 1210, 1250, 1610, or 1910H. This course is available for EM credit. GE nat sci phys course. GE foundation natural sci course.

1210 General Chemistry I U 5

First course for science majors, covering dimensional analysis, atomic structure, the mole, stoichiometry, chemical reactions, thermochemistry, electron configuration, bonding, molecular structure, gases, liquids, and solids. Prereq: One unit of high school chemistry, and Math Placement Level L or M; or a grade of C- or above in Math 1120, 1130, 1131, 1148, 1150, or above. Not open to students with credit for 1220, 1620, 1920H, 1250, 1610, or 1910H. This course is available for EM credit. GE nat sci phys course. GE foundation natural sci course.

1220 General Chemistry II U 5

Continuation of 1210 for science majors, covering solutions, kinetics, chemical equilibrium, solubility and ionic equilibria, qualitative analysis, thermodynamics, electrochemistry, descriptive chemistry, coordination compounds, and nuclear chemistry. Prereq: 1210, 1215, 1250, 1610, or 1910H; and Math Placement Level L or M, or a grade of C- or above in Math 1120, 1130, 1131, 1148, or 1150, or above. Not open to students with credit for 1620, 1920H, 2310, 2510, 2610, or 2910H. This course is available for EM credit. GE nat sci phys course. GE foundation natural sci course.

1250 General Chemistry for Engineers U 4

First course for engineering majors, covering dimensional analysis, atomic and molecular structure, the mole, stoichiometry, chemical reactions, states of matter, solutions, kinetics, equilibrium, acids and bases, thermodynamics, and electrochemistry. Prereq: One unit of high school chemistry; and Math Placement Level L or M, or a grade of C- or above in Math 1120, 1130, 1131, 1148, or 1150, or above. Not open to students with credit for 1210, 1610, 1910H, 2310, 2510, 2610, or 2910H. This course is available for EM credit. GE nat sci phys course. GE foundation natural sci course.

2310 Introductory Organic Chemistry U 4

A condensed presentation of organic chemistry organized by functional groups with an emphasis on practical applications. Prereq: 1110, 1220 (122), 1250 (125), 1620, or 1920H. Not open to students with credit for 2510 (251), 2610, or 2910H.

2510 Organic Chemistry I U 4

Introduction to structure, nomenclature, physical properties, preparation and reactions of alkanes, alkenes, alkynes, alcohols, ethers, epoxides, aldehydes and ketones. Other topics include stereochemistry, acids, bases, and reaction mechanisms. Prereq: 1220 (123), 1620 or 1920H (203H). Not open to students with credit for 252.

2520 Organic Chemistry II U 4

Continuation from 2510, including aromatic systems, carboxylic acids, carboxylic acid derivatives, amines, carbon-carbon bond-forming reactions, polymers, carbohydrates and amino acids. Prereq: 2510, 2610 (252) or 2910H (252H). Not open to students with credit for 2620 (253) or 2920H.

2540 Organic Chemistry Laboratory I U 2

Introduction to spectroscopic characterization, scientific writing, computational chemistry, and the laboratory techniques of organic chemistry, including synthesis, isolation, purification, and identification of organic compounds. Prereq or concur: 2510, 2610 or 2910H.

2550 Organic Chemistry Laboratory II U 2

Introduction to spectroscopic characterization, scientific writing, computational chemistry, and the laboratory techniques of organic chemistry, including synthesis, isolation, purification, and identification of organic compounds. Prereq: 2540 or 2940H. Prereq or concur: 2520, 2620, or 2920H.

Communication

1100 Communication in Society U 3

Role of communication in society; forms, strategies, theories and issues; interpersonal, group, organizations, public and mass communication. Prereq: Not open to students with credit for 200. GE soc sci indivs and groups course. GE foundation social and behavioral sci course.

1101 History of Communication U 3

History of human communication from the beginning of spoken and written communication to modern mediated and mass communication. GE soc sci indivs and groups course. GE foundation social and behavioral sci course.

2110 Principles of Effective Public Speaking U 3

A course in critical thinking and public speaking; how to analyze and organize information for oral presentations; basics of public speaking for majors and non-majors.

2367 Persuasive Communication U 3

This course is designed to increase your understanding of persuasive communication as it relates to citizenship and the American experience. As an advanced level writing course, the course is specifically designed to improve your persuasive writing, speaking, and critical thinking skills as specific citizenship behaviors. Prereq: Completion of GE Foundation Writing and Information Literacy course. Not open to students with credit for 2367H. GE writing and comm course: level 2. GE theme citizenship for div and just wrld course.

2850 Media and Citizenship U 3

This course provides an overview of media's role in citizenship by learning about media industry operations, how media influence us, critical evaluation of media, media responsibility and literacy, and how our experiences and biases affect the current relationship between mass media and democracy. We will learn how to engage with media to promote informed, active, and responsible citizenship. GE theme citizenship for div and just wrld course.

3442 Violence in Society and Violence in the Media U 3

This course examines the causes, consequences, and solutions to human aggression and violence. It discusses how aggression and violence are defined and measured, aggression theories, individual risk factors, contextual risk factors, protective factors, and aggression targets. It examines in detail violent media research. It also discusses how to reduce anger, aggression, and violent media effects. GE soc sci indivs and groups course. GE theme health and well-being course.

Computer Science and Engineering

1222 Introduction to Computer Programming in C++ for Engineers and Scientists U 3

Introduction to computer programming and to problem solving techniques using computer programs with applications in engineering and the physical sciences; algorithm development; programming lab experience. Concur: Math 1151, 1154, or 1161. Not open to students with credit for Engr 1281.01 or 1281.02. This course is available for EM credit.

1223 Introduction to Computer Programming in Java U 3

Introduction to computer programming and to problem solving techniques using computer programs; programming lab experience. Prereq: Math 1130, 1140, 1149, 1150, or 1151, or Math Placement Level L. This course is available for EM credit.

2111 Modeling and Problem Solving with Spreadsheets and Databases U 3

Spreadsheet and database modeling/programming concepts and techniques to solve business related problems; efficient/effective data handling, computational analysis and decision support. Additional topics: computer concepts, networking, project integration. Prereq: Math 1130 or above, or Math Placement Level L. Not open to students with credit for 1111 or 1112. This course is available for EM credit. GE quant reason math and logical anyl course. GE foundation math and quant reasoning or data anyl course.

2221 Software I: Software Components U 4

Intellectual foundations of software engineering; design-by-contract principles; mathematical modeling of software functionality; component-based software from client perspective; layered data representation. Prereq: 1212, 1221, 1222, 1223, 1224, Engr 1221, 1281.01H, 1281.02H, or CSE Placement Level A. Prereq or concur: Math 1151, 1161.01, or 1161.02. Not open to students with credit for 5022. This course is available for EM credit.

Construction Systems Management

4 Construction Systems Management

2305 Professional Development I U 2

Business communications and professional development in construction systems management including informative and persuasive writing, academic planning, project management, research techniques, teaming, report writing and presentations.Prereq: English 1110. Not open to students with credit for AgSysMt 2305. This course is available for EM credit.

Consumer Sciences: Hospitality Management

2600 Introduction to Hospitality Management U 3

Overview of the hospitality-tourism industry. Introduction to and career exploration of various segments of the hospitality-tourism field.

Earth Science

1105 Geology of the National Parks U 3

Geologic processes, materials, and history revealed in geologic settings of the National Parks. Autumn 2021 and after: Add EarthSc 1200 for Physical Science GE lab credit. Autumn 2022 and after: Add EarthSc 1200 to fulfill the GE Foundations: Natural Science requirement.Prereq: Not open to students with credit for 1100. GE nat sci phys course. GE foundation natural sci course.

1110H Honors History of Life on Earth-Global Change in the Biosphere U 3

3.5 billion years of biosphere global change; introduction to major evolutionary and extinction events; processes responsible for change; and biosphere, atmosphere, and lithosphere interrelationships. Autumn 2022 and after: Add EarthSc 1200 for Physical Science GE lab credit or to fulfill the GE Foundations: Natural Science requirement.Prereq: Honors standing, or permission of instructor. Not open to students with credit for 1100. GE nat sci phys course. GE foundation natural sci course.

1151 Natural Hazards U 3

Occurrence and causes of earthquakes, volcanoes, and related hazards, and impact on climate, society, and history. Autumn 2021 and after: Add EarthSc 1200 for Physical Science GE lab credit. Autumn 2022 and after: Add EarthSc 1200 to fulfill the GE Foundations: Natural Science requirement.GE nat sci phys course. GE foundation natural sci course.

1200 Introduction to Earth Science Laboratory U 1

Laboratory application of basic earth sciences principles to identify and categorize rocks and minerals, use and construct maps to solve geological problems, and analyze Earth's physical processes. Pair with ES 1105, 1110(H), 1108, 1121, 1151, 2203, 2204, 2205, or 2206(S) for physical science GE with lab. Pair with ES 1105, 1110(H), 1108, 1121 or 1151 to fulfill GE Foundations Natural Sciences.Prereq or concur: 1105, 1108, 1110, 1110H, 1121, 1151, 2203, 2204, 2205, 2206, or 2206S. Not open to students with credit for 1100 or 2122. Not open to students with credit for EarthSc 1121 prior to Au 21. GE nat sci phys course. GE foundation natural sci course.

2206 Principles of Oceanography U 3

Introduction to the four basic disciplines of oceanography: biological, geological, chemical, and physical. Relevance of oceanography in contemporary issues.Prereq: Not open to students with credit for 2206S. GE nat sci phys course. GE theme lived environments course.

Economics

2001.01 Principles of Microeconomics U 3

Introduction to economic theory: supply and demand for goods, services, and factor inputs; market structure; international trade, the distribution of income. First required course for students planning to take 4000-level courses in Econ.Prereq: Not open to students with credit for 2001.02, 2001.03H, 200, 200H, or AEDEcon 2001 (200). This course is available for EM credit. GE soc sci human, nat, and econ resources course. GE foundation social and behavioral sci course. SS Admis Cond course.

2002.01 Principles of Macroeconomics U 3

Introduction to the theory of national income determination; economic fluctuations; money; government policy; international economics.Prereq: Not open to students with credit for 2002.02, 2002.03H, 201, or 201H. This course is available for EM credit. GE soc sci orgs and politics course. GE foundation social and behavioral sci course.

Education: Teaching and Learning

2189 Field Experience U 1 - 2

The EDUTL 2189 field experience is designed to provide undergraduate students, in pre-education programs, with an opportunity to work with youth within a professional setting in a school, tutoring environment or community agency.Prereq: Permission of instructor. Repeatable to a maximum of 15 or hrs or 15 completions.

2367 Education, Society and Writing U 3

Designed to help students reflect critically, both orally and in writing, on the social, political, and cultural contexts that influence education in today's society.Prereq: A GE level 1 writing course. GE writing and comm course: level 2. GE foundation writing and info literacy course.

2368 Introduction to Children's Literature U 3

This is a survey course in which students study the historical and contemporary elements of literature intended for children, including picturebooks; traditional tales; novels of realism, and fantasy; nonfiction; poetry; and multicultural books.Prereq: English 1110, or equiv. Not open to students with credit for 467. GE lit course. GE foundation lit, vis and performing arts course.

3160 Application of Development in Learning Contexts U 3

Designed for students to apply theories and research of child growth and development in multiple learning contexts.Prereq: Not open to students with credit for 460. GE soc sci indivs and groups course. GE foundation social and behavioral sci course.

3189.01 Field Experience: Early Childhood Education U 1 - 2

This field experience is designed as a practice-based companion to the EC Pedagogy class.Prereq: Admission to Early Childhood Education Major. Repeatable to a maximum of 4 cr hrs or 4 completions.

3189.02 Field Experience: Middle Childhood Education U 1 - 2

The experience is designed to provide : lesson planning, teaching, and classroom management; student learning, interests, and perspectives; (3) the requirements of being a professional educator; and effectively bringing together the work done in a university classroom with work done in grade 4-9 classrooms.Prereq: Admission to Middle Childhood Education Major. Repeatable to a maximum of 4 cr hrs or 4 completions.

3189.09 Field Experience: Child and Youth Studies U 1 - 2

Field experience designed to provide undergraduate students in the Child & Youth Studies program an opportunity to work with a cooperating professional within an educational or community organization focusing on teaching & learning.Prereq: Admission to Child and Youth Studies Major. Repeatable to a maximum of 4 cr hrs or 4 completions.

3356 Literature for Adolescents U 3

Literature for individual, group, and whole-class reading in junior and senior high schools; interest factors and literary value as criteria for selection; bibliographic aids.Prereq: English 1110 or equivalent. Not open to students with credit for 656 or 3356E. GE lit course. GE foundation lit, vis and performing arts course.

4189.01 Advanced Field Experience: Early Childhood Education U 1 - 4

The field experience is designed to provide: classroom practices in lesson planning, teaching, and guidance and discipline; student learning, interests, and perspectives; the official and unofficial requirements of being a professional educator; and how you can effectively bring together the work done in a university classroom with your work in classrooms with students age 3 to grade 3.Prereq: Admission to Early Childhood Education Major. Repeatable to a maximum of 12 cr hrs or 3 completions.

4189.02 Advanced Field Experience: Middle Childhood Education U 1 - 4

The field experience is designed to provide: best practices in lesson planning, teaching, and classroom management; student learning, interests, and perspectives; the official and unofficial requirements of being a professional educator; and how you can effectively bring together the work done in a university classroom with grade 4-9 classrooms.Prereq: Admission to Middle Childhood Education Major. Repeatable to a maximum of 12 cr hrs or 3 completions.

4191 Internship U 1 - 15

Internship in an educational or community setting. Prereq: Permission of instructor. Repeatable to a maximum of 15 cr hrs or 15 completions.

5005 Equity and Diversity in Education U G 3

Focuses on issues of diversity, equity, teacher beliefs, and multicultural education. Emphasis is placed on the roles of identity and lived experience and its influences on approaches to teaching and learning in educational settings.GE theme citizenship for div and just wrld course.

5101 Teaching and Learning with Drama: Introduction U G 3

Introduction to the use of drama and social imagination in education. Prereq: Jr or Sr standing with some field experience, or experienced teacher. Not open to students with credit for 633. Repeatable to a maximum of 6 cr hrs.

5102 Teaching & Learning of Literacy in Grades Pre K-5 U G 3

Examination of children's oral and written language development and related theoretical understandings instrumental for teaching language arts including evaluation processes and instructional materials.Prereq: 5469, and enrollment in Education major or Master of Education.

5108 Teaching and Learning of Mathematics in Grades Pre-K - 3 U G 3

Prepares preservice teachers with knowledge, skills of, and ability to use standards, learning theories, pedagogies, assessment, and technology for the teaching and learning of Pre-K - 3 early childhood mathematics in a diverse classroom.Prereq: Admission to Early Childhood teaching licensure program, or permission of instructor.

5123 Early Childhood Pedagogy U G 3

Pedagogy I explores sociocultural perspectives on teaching and learning in early childhood and elementary education, the role of teacher as researcher/inquirer, and the ways in which sociocultural pedagogies interface with standard-based education. Prereq: Admission to major or M.Ed. Not open to students with credit for 723.

5129 Teaching and Learning of Science in Grades Pre K - 5 U G 3

This course is designed to prepare early childhood teacher candidates to teach PreK-5 students science.Prereq: Enrollment in Education major or Master of Education.

Education: Teaching and Learning 5

5137	Teaching and Learning of Social Studies Grades Pre-K - 3	U G	3
Designed to provide opportunities to examine interesting and effective social studies content knowledge, cultural understandings, and pedagogies for the early childhood learner within global contexts. Prereq: Not open to students with credit for 737.			
5191.01	Supervised Student Teaching Internship: Early Childhood Education	U G	3 - 15
Student teaching is designed to assess and support preservice preK-3rd grade teachers as they develop the necessary knowledge, skills, and dispositions required for beginning level teachers.Prereq: Admission to Early Childhood Education major or MEd program. Repeatable to a maximum of 30 cr hrs or 2 completions.			
5191.02	Supervised Student Teaching Internship: Middle Childhood Education	U G	3 - 15
Student teaching is designed to assess and support preservice 4th-9th grade teachers as they develop the necessary knowledge, skills, and dispositions required for beginning level teachers.Prereq: Admission to Middle Childhood Education Major or MEd program. Repeatable to a maximum 30 cr hrs or 2 completions.			
5195.01	Reflective Seminar: Early Childhood Education	U G	1 - 4
This course serves as the place for mediating learning & applying it to the practical. You will engage in reading, discussion, & reflection to develop your understanding of the relationship between what you learn in the university classroom & what you experience in the elementary classroom.Prereq: Admission to Early Childhood Education Major or MEd program. Repeatable to a maximum of 10 cr hrs or 5 completions. This course is graded S/U.			
5195.02	Reflective Seminar: Middle Childhood Education	U G	1 - 4
Reflective Seminar is part one of a 3-part seminar that takes place over the course of 3 semesters. This course includes what is often viewed as the more traditional 'science' of teacher preparation.Prereq: Admission to Middle Childhood Education Major or MEd program. Repeatable to a maximum of 10 cr hrs or 5 completions. This course is graded S/U.			
5195.09	Reflective Seminar: Child and Youth Studies	U G	1 - 4
This course is designed to assess and support student in their final year as they develop the necessary knowledge, skills, and dispositions required for entry level education professionals.Prereq: Admission to Child and Youth Studies Major. Repeatable to a maximum of 10 cr hrs or 5 completions. This course is graded S/U.			
5220	Foundations of Middle Childhood Teaching and Learning	U G	3
Introduces the foundations and major concerns in middle childhood education using contemporary research, scholarship, and practice, and exploring traditional and newer course materials.			
5225	Diverse Literature and Comprehension - Elementary-Middle Education	U G	3
Meets state requirements for understanding theory and methods linking the teachers' understanding of diverse literature with comprehension theory and practice and the related construction of literate environments.			
5226	Composing Print + Digital Multimodal Texts	U G	3
This course focuses on interactive, creative, critical, dialogic approaches for teaching and learning composing in both print and digital multimodal formats, and is particularly applicable to early and middle childhood classrooms.			
5230	Language Arts Methods for Preservice Middle Childhood Teachers	U G	3
Preservice teachers study methods for teaching middle childhood students' reading and writing. They explore the significance of students' interests, language, and communities to their knowledge and meaning-making of the Language Arts. Prereq: Not open to students with credit for 706.			
5270	Mathematics Methods for Preservice Middle Childhood Teachers	U G	3
Preservice teachers study methods for teaching middle childhood mathematics. These methods include instruction, assessment, and learning theory to support the teaching and learning of mathematics in grades 4 through 9.			
5275	Science Methods for Preservice Middle Childhood Teachers	U G	3
This course provides future middle childhood science teachers with the skills, knowledge, and resources for providing quality learning experiences for all students. Course activities will focus on the preparation and implementation of inquiry-based instruction. This course will also cover issues such as styles of inquiry, standards-based teaching, lesson planning, assessment, and differentiation.			
5280	Social Studies Methods for Preservice Middle Childhood Teachers	U G	3
Preservice teachers study planning, teaching and assessing of students' learning of social studies education, emphasizing the value of using effective and diverse teaching strategies and meaningful learning activities appropriate for grades 4-9. Prereq: Not open to students with credit for 738.			

5468	Foundations of Reading and Literacy	U G	3
Introduction to the theories and practices of teaching and learning of literacy for children in early and middle childhood. Major themes of the course are a child-centered philosophy of literacy instruction and diversity awareness - the need for teachers to be aware of the diversity of backgrounds and abilities that children bring to the classroom and of strategies for dealing with that diversity.			
5469	Language and Word Study for All Learners	U G	3
This course provides a detailed examination of the ways that oral and written languages work and how this supports development of English word reading and spelling skills for learners who are monolingual speakers of Standard English as well as those who speak other languages and varieties of English.Prereq: 5468.			
5471	Clinical Practice in Treating Reading Disabilities	U G	3
Use of test materials in the diagnosis of reading disabilities; practice with remedial procedures.Prereq: 5470, or permission of instructor. Not open to students with credit for 671. Repeatable to a maximum of 6 cr hrs.			

Educational Studies

2189S	First Education Experience Program (FEEP)	U	3 - 5
Provides opportunities for students to explore education as a possible career path via a combination of field and seminar requirements. Students spend time in local, public PreK-12 school-based settings, interacting with various professionals and students. GE service learning course.			

Educational Studies: Counselor Education

2272	Seminar: Personal Growth to Increase Career Competencies	U	2
Designed to provide opportunities to assist in self-exploration of and clarification for more effective development beyond the level of average performance. Prereq: Not open to students with credit for EduPAES 270.02. This course is progress graded (S/U).			

Educational Studies: Educational Psychology

1159	Online Learning Strategies and Skills	U	3
Explores how to use the web for a successful college experience. Covers navigating online resources, communicating academic content, and enhancing learning via the web. This course has been peer reviewed and is officially recognized by Quality Matters as meeting the standards of a quality online course. For more information, visit www.qmprogram.org .			
1259	Learning and Motivation Strategies for College Success	U	3
Teaches learning and motivation strategies to help students manage time, improve grades, and achieve college success. Students will develop practical skills for personal and academic effectiveness, while also understanding the related research. Topics include boosting motivation, overcoming procrastination, enhancing organization and concentration, and applying effective study strategies.			
2059	Becoming a Self-Regulated Learner	U	2
This course will build strategies and motivation to overcome recent academic challenges and prepare for success in the future. Main topics we will cover include self-regulation, active learning, studying, using resources, planning, goal setting, and time management. Our entire course is geared toward helping students become self-regulated learners.			
2309	Psychological Perspectives on Education	U	3
This course deals with the major theories of human development, motivation and learning. Planning of instruction, teaching strategies, assessment and classroom management are examined. Authentic pedagogical practices are used to gain an understanding of the teaching and learning process.Prereq: Not open to students with credit for EduPL 309.			

Educational Studies: Philo & Hist of Education

3206	School and Society	U	3
Use of concepts and methods of history, philosophy and the social sciences to grasp the interrelationship between a diverse society and education.GE diversity soc div in the US course. GE foundation race, ethnicity and gender div course.			
3410	Philosophy of Education	U	3
An introduction to key philosophical issues in education, focusing on the questions: Who should be educated? What should be taught? Who gets to decide?GE cultures and ideas course. GE foundation historical and cultural studies course.			

Educational Studies: Quant Rsrch, Evaltn & Msrmnt

3005	Learner Centered Classroom Assessment	U	3
Offers an in-depth look at classroom assessment that meets the needs of 21st century teaching and learning. During this course, prospective teachers will determine how classroom assessment strategies can benefit their teaching practices and their students learning. They will study how to plan, develop, and manage student-centered assessment.			

6 Educational Studies: Special Education

Educational Studies: Special Education

5651	Introduction to Exceptional Children	U G	3
Introduction to Exceptional Children is an overview of the education of exceptional learners. This course focuses on students whose attributes/learning abilities differ from the norm to such an extent that an individualized program of special education is required to meet their needs. Enrollees will learn about the categories of special education (and their criteria), prevalence, and demographics.			
5734.02	Methods of Instruction for Elementary Children with Mild/Moderate Disabilities: Mild/Moderate	U G	3
This is a method course with a field placement that will provide students with information and strategies for working with children who have mild disabilities.Prereq: 5742 or 5734.02; and enrollment in Special Education: Mild/Moderate major; or permission of instructor.			
5735.02	Methods of Instruction for Secondary Students with Mild/Moderate Disabilities: Mild/Moderate	U G	3
Provides advanced training in specialized techniques and advanced teaching strategies for middle and high school students with mild/moderate disabilities.Prereq: 5743 or 5743.02; and enrollment in Special Education: Mild to Moderate major; or permission of instructor.			

Engineering

1181.01	Fundamentals of Engineering I	U	2
Engineering problem solving utilizing computational tools such as Excel and Matlab; hands-on experimentation; modeling; ethics; teamwork; written, oral and visual communications.Prereq or concur: Math 1140 or 1141; or Math 1150 or above. Not open to students with credit for Engineer 183.01, 183.02, Engr 1182.01, 1182.02, 1182.03, 1282.01, 1282.02, 1282.03, 1282.04, 1186.01, 1187, or 1188.			
1182.01	Fundamentals of Engineering II	U	2
Introduction to 3D visualization and CAD; engineering design-build process; teamwork; written, oral and visual communications; project management.Prereq: 1181.01 or 1181.02 or 1281.01H or 1281.02H or 1281.03H. Prereq or Concur: Math 1141; or Math 1151 or above. Not open to students with credit for Engineer 181.01 or 181.02 or Engr 1186 or 1187 or 1188; not repeatable if credit earned for 1182.01 or 1182.02 or 1182.03 or 1282.01H or 1282.02H or 1282.03H or 1282.04H.			

Engineering Technology (BS)

1200	Introduction to Engineering Technology	U	1
Introduction to the roles available in engineering technology, professional development planning for students pursuing this degree, and exposure to common elements in engineering technology. Course work will emphasize written and verbal communication skills.Prereq: Enrollment in the BSET program.			
1500	Manufacturing Processes I	U	3
History of manufacturing, tools and machines, and operations of the machine shop equipment. Opportunity to function individually and on teams, and communicate effectively to learn to work in groups to accomplish a task. The skills learned from this class are transferable to all areas of day to day professional life which makes it valuable in other contexts.			
1600	Engineering Graphics	U	3
Develop skills in graphic design and visualization through experience creating and interpreting 2D Computer Aided Drawings in AutoCAD. Explore various forms of technical graphics used in the field of Engineering Technology including facility layouts, piping and instrumentation diagrams, and electric schematics. Emphasis on utilizing technical graphics to solve Engineering Technology problems.			
2100	Introduction to Robotics with Vision	U	2
Introduction to Robotics teaches the basics of robotics, focused on the role of an operator, technician, or engineer/programmer. It covers robots, robot safety, robot programming, and setup and training of a 2D vision system. The knowledge learned in lectures will be applied to a robot in a laboratory environment through a series of guided labs.Prereq or concur: 2500.			
2300	Electrical Circuits for Engineering Technology	U	3
Fundamentals of electrical circuits, measuring & analyzing data, & troubleshooting those circuits. Analysis of Direct Current (primarily) & Alternating Current circuits (less content) & effects of different components- resistors, capacitors, inductors, and other components in electrical circuits. DC/AC circuit dynamics that will be used in studies of industrial & electronic control applications.Prereq: Math 1155 or 1172, and Physics 1231 or 1251. Not open to students with credit for ECE 2300.			
2500	Manufacturing Processes II	U	2
Modern manufacturing processes. Design, create, and assembly of structure/objects by combining the manufacturing and graphical design knowledge. Opportunity to function individually and on teams and communicate effectively to learn to work in groups to accomplish a task. The skills are transferable to all areas of day-to-day professional life which makes it valuable in other contexts.Prereq: 1500.			

3100	Material Science with Engineering Technology Applications	U	½
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Supplemental course for BSET students that should be taken along with MatScEn 2010. This course will provide hands-on exposure to common manufacturing materials physical and chemical characteristics (like electrical and heat conductance) as well as testing methods (like stress, strain, hardness, brittleness, and microstructure.)Prereq: Physics 1250 or 1260, and Math 1151 or 1154, and Chem 1210 or 1250; or permission of instructor.

3600	Technology, Structure and Applications for Controls	U	3
This course communicates the structure of a manufacturing organization, the technology and systems in each level of the organization and the roles in the automation, control, and monitoring of automation manufacturing systems. It provides insight in the types of manufacturing systems, equipment/machinery, sensors/control devices and how to develop code for these systems for an integration.Prereq: 3900.			

3700	Mechanical Processes	U	3
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Mechanical Processes is a 3-hr course designed to help students become familiar with modern mechanical processes as well as hydraulics/pneumatics and mechanical systems in manufacturing applications. The fundamentals and applications of mechanical systems included include pneumatics and hydraulics, cams, gears, bearings, gears, rotary and linear actuation.Prereq: 2500 and Engr 1182.

3800	Project Management for Engineering Technology	U	3
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Project Management is a course that focuses on waterfall (PMBOK) and Agile methodologies for managing projects in the manufacturing industry. Emphasis is placed on project initiation, planning, executing, monitoring & controlling, and closing processes. This course will provide students with an overview of leadership roles and responsibilities, as well as interpersonal skills, conflict resolution.Prereq: 2500 and ISE 2040, or permission of instructor. Not open to students with credit for ISE 3800.

3900	Industrial Automation PLC1	U	3
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Industrial Automation PLC1 is a 3-credit hour course designed as the first of two courses intended to provide the students with skills in industrial automation that can be applied in a variety of technical fields related to manufacturing.Prereq: 2300; and CSE 1222 or 1223; and Math 1155 or 1172.

4200	Industrial Automation - PLC2	U	3
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Industrial Automation PLC2 is designed as the second of two courses to provide the students with skills in industrial automation for manufacturing. The course is designed to provide students with the comprehensive review of functions, operation, and communication of automated industrial systems including PID loops, HMIs, data transfer, troubleshooting PLC networks for equipment/process integration.Prereq: 3600.

4300	Facility Layout and Integration	U	3
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Facility Layout and integration is a 3-hr course designed to give student skills needed to create effective layouts considering people, technology, process, throughput, and support systems. The class will build upon skills gained in previous classes in AutoCAD and Manufacturing Processes as well as use skills in analysis and design skills.Prereq: 3800.

4400	Leadership and Change Management	U	3
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In-depth evaluation of the concepts and principles of effective leadership, the characteristics of leaders and followers, and the principles of change management. Course work will emphasize written and verbal communication skills, in addition to presentation skills and exposure to real-world case examples.Prereq: 4300.

4600	Power and Drives	U	3
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ENGRTEC 4600, Power and Drives, is a 3-hour course designed to introduce the student to high-voltage power generation/transmission to production facilities and distribution within the facility. Further the course will focus on applications related to motors and variable frequency drives. Applications for power (12,000 volts to 120 volts) are found in typical production facilities.Prereq: 2300.

4700	Networks, Security, & Safety Applications	U	3
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This course will provide you with an understanding of the basics of networking devices and systems along with the cyber security considerations and technology required for the deployment of these solutions. The cyber security materials will include a study of the human elements that impact this space. The course will provide an introduction to the safety control systems deployed in manufacturing.Prereq: 3600.

4900	ENGRTEC Capstone I	U	3
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This course is designed to provide students the opportunity to test their level of acquired knowledge, experience, and leadership in an actual, well-defined customer project environment. Students will be provided an assigned project of interest, work in project teams, interacting with an engineering client leadership/people, to define, design, test and implement an actual working product, service.Prereq: 3800.

4910	ENGRTEC Capstone II	U	3
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This is the second course of the series designed to provide students the opportunity to test their level of acquired knowledge, experience, and leadership in an actual, well-defined customer project environment. Students will be provided an assigned project of interest, work in project teams, interacting with an engineering client.Prereq: 4900.

English

1110.01	First-Year English Composition	U	3
Practice in the fundamentals of expository writing, as illustrated in the student's own writing & in the essays of professional writers. May be available as a service learning course with five hours community service required at the Lima campus only.Prereq: EduTL1902 (108.01) or 1902.04 (108.01), or English Placement Level 4. Not open to students with credit for 1109 (109.01 or 109.02), 1110.01 (non-DL version), 1110.01H (110.01H), 1110.02 (110.02), 1110.02H (110.02H), 1110.03 (110.03), 1167H (167H), 110.01. This course is available for EM credit. GE writing and comm course: level 1. GE foundation writing and info literacy course.			
1110.02	First-Year English Composition	U	3
Practice in the fundamentals of expository writing, as illustrated in the student's own writing and in the essays of professional writers. Taught with an emphasis on literary texts.Prereq: EduTL 1902 or 1902.04, or English Placement Level 4. Not open to students with credit for 1109, 1110.01, 1110.01H, 1110.02 (non-DL version), 1110.02H, 1110.03, 1167H, or equiv. This course is available for EM credit. GE writing and comm course: level 1. GE foundation writing and info literacy course.			
1110.03	First-Year English Composition	U	3
Intensive practice in fundamentals of expository writing illustrated in the student's own writing and essays of professional writers; offered in a small class setting and linked with an individual tutoring component in its concurrent course, 1193. This course is available for EM credit only through the AP program.Prereq: 1109, or English Placement Level 5 (Placement Level 4 allowed if student requests service). Concur: 1193. Not open to students with credit for 1110.01 (110.01), 1110.01H (110.01H), 1110.02 (110.02), 1110.02H (110.02H), 1167H (167H), or 110.03, or equiv. GE writing and comm course: level 1. GE foundation writing and info literacy course.			
1193	Individual Studies	U	1 - 4
Intensive practice in the fundamentals of expository writing. Prereq: Permission of Director of First-Year Writing. Concur: 1110.03. Repeatable to a maximum of 6 cr hrs or 6 completions. This course is graded S/U.			
2201	Selected Works of British Literature: Medieval through 1800	U	3
An introductory critical study of the works of major British writers from 800 to 1800.Prereq: 1110.01, or equiv. Not open to students with credit for 2201H. GE lit and diversity global studies course. GE foundation lit, vis and performing arts course.			
2202	Selected Works of British Literature: 1800 to Present	U	3
An introductory critical study of the works of major British writers of the 19th and 20th centuries.Prereq: 1110, or GE foundation writing and info literacy course. Not open to students with credit for 2202H. GE lit and diversity global studies course. GE foundation lit, vis and performing arts course.			
2220	Introduction to Shakespeare	U	3
Study of selected plays designed to give an understanding of drama as theatrical art and as an interpretation of fundamental human experience.Prereq: Completion of GE Foundation Writing and Information Literacy course. Not open to students with credit for 2220H. GE lit and diversity global studies course. GE foundation lit, vis and performing arts course.			
2263	Introduction to Film	U	3
Introduction to methods of reading film texts by analyzing cinema as technique, as system, and as cultural product.Prereq: 1110.01 (110.01) or equiv. Not open to students with credit for 263. GE VPA course. GE foundation lit, vis and performing arts course.			
2277	Introduction to Disability Studies	U	3
Foundational concepts and issues in disability studies; introduction to the sociopolitical models of disability.Prereq: 1110.01. GE cultures and ideas course. GE theme health and well-being course.			
2281	Introduction to African-American Literature	U	3
A study of representative literary works by African-American writers from 1760 to the present.Prereq: Completion of GE Foundation Writing and Information Literacy course. Not open to students with credit for AfAmAST 2281. GE lit and diversity soc div in the US course. GE foundation lit, vis and performing arts and race, ethnicity and gender div course. Cross-listed in AfAmAST.			
2282	Introduction to Queer Studies	U	3
Introduces and problematizes foundational concepts of the interdisciplinary field of queer studies, highlighting the intersections of sexuality with race, class, and nationality.Prereq: 1110.01. Not open to students with credit for WGSST 2282. GE cultures and ideas and diversity soc div in the US course. GE foundation historical and cultural studies and race, ethnicity and gender div course. Cross-listed in WGSST.			
2290	Colonial and U.S. Literature to 1865	U	3
Introductory study of significant works of U.S. literature from its Colonial origins to 1865.Prereq: 1110.01 (110.01) or equiv. Not open to students with credit for 290. GE lit course. GE foundation lit, vis and performing arts course.			
3264	Monsters Without and Within	U	3
Storytellers have long used monsters not only to frighten us but also to jolt us into thinking deeply about ourselves, others, and the world we live in. This course examines how various horror genres use monsters to explore issues of wellbeing and citizenship, and debates about race, gender, sexual orientation, mental health, social justice, and personal responsibility.Prereq: Completion of GE Foundation Writing and Information Literacy course. GE theme citizenship for div and just wrld and health and well-being course.			

3271	Structure of the English Language	U	3
Students learn basic characteristics of English linguistics focusing on the basic building blocks of language; the sounds of English and how they are put together, word formation processes, and rules for combining words into utterances/sentences. Students investigate and explore linguistic variation, accents of American English, and the implications of language evaluation in educational settings.Prereq: 1110.01 (110.01). Not open to students with credit for 4570 (570), 6760 (760), 271, 669, 671, 2271, or Linguist 601. GE cultures and ideas course. GE foundation historical and cultural studies course.			
3395	Literature and Leadership	U	3
In this course students consider leadership as a component of national citizenship and literature as a mode of exploring and analyzing a range of perspectives on leadership. The course will encourage students to think about how responses to power are mediated by race, gender, and class and how literary study can help them reflect on and articulate their own leadership strengths and aspirations.Prereq: 1110. GE theme citizenship for div and just wrld course.			
3398	Methods for the Study of Literature	U	3
Serves as the "Methods" course for the Literature and Creative Writing concentrations within the English major. Its purpose is to familiarize students with literary studies in such a way as to prepare them for advanced courses in all literary fields and the genres of Creative Writing. Required of English majors. Open to English majors only or others by dept permission.Prereq: 1110.01, and declared major in English. Sr students must have the permission of the Director of Undergraduate Studies. Not open to students with credit for 2298 or 3398H.			
4150	Cultures of Professional Writing	U	3
Examine writing in various workplaces. Analyze writing discourse that shapes professional organizations. Explore ongoing technological and cultural shifts required of workplace writers and the role of digital media. Prereq: 1110 and any 2367. Not open to students with credit for HumCol 450.01, 450.02, 450.03, or CSTW 4150.			
4189	Professional Writing Minor: Capstone Internship	U	3
Students work onsite in an organization doing writing-related work and meet weekly to discuss related topics. Prereq: 4150 or CSTW 4150, and 2 courses in Professional Writing minor. Not open to students with more than 6 cr hrs of CSTW 4191. Repeatable to a maximum of 9 cr hrs. This course is graded S/U.			
4543	20th-Century British Fiction	U	3
A study of the development of British fiction after 1900, with emphasis on such major novelists as Conrad, Joyce, Lawrence, and Woolf. Prereq: 10 qtr cr hrs or 6 cr hrs of English at 2000-3000 level, or permission of instructor. 5 qtr cr hrs in 367 or 3 cr hrs in 2367 in any subject is acceptable towards the 6 cr hrs. Not open to students with credit for 643 or 543.			
4553	20th-Century U.S. Fiction	U	3
A study of American fiction after 1914, with emphasis on such major figures as Anderson, Fitzgerald, Hemingway, and Faulkner. Prereq: 10 qtr cr hrs or 6 cr hrs of English at 2000-3000 level, or permission of instructor. 5 qtr cr hrs in 367 or 3 cr hrs in 2367 in any subject is acceptable towards the 6 cr hrs. Not open to students with credit for 553.			
4564.01	Major Author in Medieval and Renaissance British Literature	U	3
Intensive study of one of the major authors of the period. Prereq: 10 qtr cr hrs or 6 cr hrs of English at 2000-3000 level, or permission of instructor. 5 qtr cr hrs in 367 or 3 cr hrs in 2367 in any subject is acceptable towards the 6 cr hrs. Not open to students with credit for 564.01.			

Evolution, Ecology and Organismal Biology

2520	Human Physiology	U	3
A survey of the human nervous system, sense organs, muscle function, circulation, respiration, digestion, metabolism, kidney function, and reproduction. Prereq: 3 sem or hrs in Biological Sciences. Not open to students with credit for 232. GE nat sci bio course. NS Admis Cond course.			
3320	Organismal Diversity	U	3
A survey of organismal diversity and the evolutionary relationships between and within major groups of organisms. Class is laboratory based. Prereq: 3310. Not open to students with credit for 405.01 and 405.02.			
3410	Ecology	U	4
Distribution and abundance of species, population dynamics, community ecology, ecosystem dynamics, and applied perspectives. Also available summer term at Stone Lab. Prereq: Biology 1114 or 1114H, or permission of instructor. Not open to students with credit for 503.01, 503.02, and 503.03.			
4999	Undergraduate Thesis Research	U	1 - 12
Undergraduate research towards a thesis in Evolution and Ecology, or Zoology. Prereq: 8 cr hrs in Biological Sciences, and permission of instructor. Repeatable to a maximum of 12 cr hrs or 5 completions. This course is graded S/U.			

Exploration

8 Exploration

1100.01	University Exploration Survey	U	1
Introduction to the process of decision making and exploring majors at Ohio State; introduction to university community; strategies for successful transition to and participation in that community; university resources and procedures. Prereq: Fresh standing in Exp, and permission of instructor. Not open to students with credit for 100.01, 100.01H, 100.02, or 100.03.			

1100.01H	Exploration Survey	U	1
University survey class for new freshmen honors students.Prereq: First year student in Exp or permission of instructor. Not open to students with credit for 100.01, 100.01H, 100.02 or 100.03.			

1100.02	University Exploration Survey	U	1
Introduction to the processes of decision making and exploring majors at Ohio State; introduction to the university community; strategies for success transition to and participation in that community; university resources and procedures. Prereq: Transfer student in EXP, and permission of instructor. Not open to students with credit for a university survey course from another college or with credit for: 1100.01 (100.01), 1100.01H (100.01H), 100.02, 100.03, USAS 100, 100.11, or 100.21.			

French

1101.61	Beginning French I: Individualized DL	U	1 - 4
Individualized introduction to French via distance learning; development of listening, reading, speaking, and writing skills. Taught in French. Course not open to native speakers, students with EM credit, or to students with two or more years of study in this language in high school.Prereq: Not open to students with credit for 1101.01, 1101.21, or 4 cr hrs of 1101.51 or 1101.61. Repeatable to a maximum of 4 cr hrs or 4 completions. This course is available for EM credit. GE for lang course. GE world languages course.			

1102.61	Beginning French II: Individualized DL	U	1 - 4
Continued individualized study of French via distance learning; development of listening, reading, speaking, and writing skills; readings based on contemporary French culture and literature. Taught in French.Prereq: 1101.01, 1101.21, or 4 cr hrs of 1101.51 or 1101.61. Not open to students with credit for 1102.01, 1102.21, or 4 cr hrs of 1102.51 or 1102.61. Repeatable to a maximum of 4 completions or 4 cr hrs. This course is available for EM credit. GE for lang course. GE world languages course.			

1103.61	Beginning French III: Individualized DL	U	1 - 4
Continued development of listening, speaking, reading and writing with an emphasis on oral and written skills; focus on functional topics and thematic vocabulary. Taught in French via distance learning.Prereq: 1102.01, 1102.21, 1155.01, 1155.21, or 4 cr hrs of 1102.51 or 1102.61. Not open to students with credit for 1103.01, 1103.02, 1103.21, or 4 cr hrs of 1103.51 or 1103.61. Repeatable to a maximum of 4 cr hrs or 4 completions. This course is available for EM credit. GE for lang course. GE world languages course.			

General Education

1201	GE Launch Seminar	U	1
This course is first GE Bookend class. The Launch seminar provides a strong introduction for the broad goals of the General Education program, introduces key skills, and supports sustained growth in terms of attaining program goals.This course is graded S/U. GE bookend launch seminar course.			

Geography

2500	Cities and their Global Spaces	U	3
Globalization and urbanization; urban economies, spaces, and societies; function, form, and pattern in developed and developing world cities.GE soc sci orgs and politics and diversity global studies course. GE theme lived environments course.			
3800	Geographical Perspectives on Environment and Society	U	3
Geographical understanding of interactions between society and environment; how historical and contemporary views of the environment influence people's actions toward the environment and other people.GE soc sci human, nat, and econ resources course. GE theme lived environments course.			

History

2001	Launching America	U	3
An intermediate-level approach to American history in its wider Atlantic context from the late Middle Ages to the era of Civil War and Reconstruction.Prereq or concur: English 1110.xx, GE foundation writing and info literacy course, or permission of instructor. Not open to students with credit for 1151. GE historical study and diversity soc div in the US course. GE foundation historical and cultural studies course.			
2002	Making America Modern	U	3
A rigorous, intermediate-level history of modern U.S. in the world from the age of industrialization to the age of globalization. Sometimes this course is offered in a distance-only format.Prereq or concur: English 1110.xx, GE foundation writing and info literacy course, or permission of instructor. Not open to students with credit for 1152. GE historical study and diversity soc div in the US course. GE foundation historical and cultural studies course.			

2002H	Making America Modern	U	3
Examines twentieth century American history in a global perspective, with special emphasis on the themes of industrial, military, and global expansion, as well as the expansion of civil and political rights of the American people.Prereq or concur: Honors standing, and English 1110.xx; or permission of instructor. Not open to students with credit for 2002. GE historical study and diversity soc div in the US course. GE foundation historical and cultural studies course.			

2100	Introduction to the Spanish Atlantic World	U	3
Introductory survey of the Spanish Empire in the Americas to 1825. Sometimes this course is offered in a distance-only format.Prereq or concur: English 1110.xx, or permission of instructor. GE historical study and diversity global studies course. GE foundation historical and cultural studies course.			

2105	Latin America and the World	U	3
Latin America's relationship with the World since independence (1825) focusing on cases of direct and indirect U.S. intervention as well as European influences and globalization. Sometimes this course is offered in a distance-only format.Prereq or concur: English 1110.xx, or permission of instructor. GE historical study and diversity global studies course. GE foundation historical and cultural studies course.			

2650	The World since 1914	U	3
Global perspective on major forces that shaped the world since 1914. Provides students with factual knowledge and a critical interpretive framework for responsible global citizenship.Prereq or concur: English 1110.xx, or permission of instructor. GE historical study and diversity global studies course. GE foundation historical and cultural studies course.			

2651	World History before the Modern Age	U	3
A thematic approach to exploring selected major processes and events that shaped human experience between the Stone Age and 1750. Specific topics and content can vary.Prereq or concur: English 1110, or equiv. Not open to students with credit for 1681. GE historical study and diversity global studies course. GE foundation historical and cultural studies course.			

2800	Introduction to the Discipline of History	U	3
Investigation of the methods and analytical approaches historians use to understand the past.Prereq or concur: English 1110.xx.			

3014	Gilded Age to Progressive Era, 1877-1920	U	3
Advanced study of U.S. social, political, cultural, foreign policy history from 1877-1920: Industrialization; immigration; urbanization; populism; Spanish-American War; progressivism; WWI.Prereq or concur: English 1110.xx, or completion of GE Foundation Writing and Information Literacy Course, or permission of instructor. GE historical study and diversity soc div in the US course. GE theme citizenship for div and just wrld course.			

3017	The Sixties	U	3
Examination of postwar America's pivot point, focusing on civil rights; liberal, radical, and conservative politics; sweeping social, cultural, and economic change; and the Vietnam War.Prereq: English 1110.xx, or permission of instructor. GE historical study course. GE theme citizenship for div and just wrld course.			

3106	History of Mexico	U	3
History of Mexico during precolonial, colonial, and independence periods with emphasis on the 19th and 20th centuries.Prereq: English 1110.xx, or permission of instructor. GE historical study and diversity global studies course. GE foundation historical and cultural studies course.			

3245	The Age of Reformation	U	3
The history of the Protestant, Catholic, and Radical Reformations of 16th and early 17th century Europe.Prereq: English 1110.xx, or permission of instructor. GE historical study course. GE theme citizenship for div and just wrld and traditions, cultures, and transformations course.			

3310	History of African Cinema	U	3
Emergence and development of African cinema as a film genre and part of material culture. European colonial and ethnographic film to modern African cinema. Sometimes this course is offered in a distance-only format.Prereq: English 1110.xx, or permission of instructor. Not open to students with credit for AfAmASt 3320. GE historical study and diversity global studies course. Cross-listed in AfAmASt 3320.			

3561	Citizenship and American Military History: 1902 to the Present	U	3
This course examines how uniformed service impacted Americans' conception of citizenship from the aftermath of the Spanish-American War through the wars in Afghanistan and Iraq after the terrorist attack on the U.S. homeland on September 11, 2001.Prereq or concur: English 1110.xx, or completion of GE Foundation Writing and Information Literacy Course, or permission of instructor. GE historical study course. GE theme citizenship for div and just world course.			

3570	World War II	U	3
Study of the causes, conduct, and consequences of World War II.Prereq: English 1110.xx, or permission of instructor. GE historical study and diversity global studies course. GE foundation historical and cultural studies course.			

3701	History of American Medicine	U	3
Survey of the history of American medicine from the Colonial period through the twentieth century.Prereq or concur: English 1110.xx, or completion of GE Foundation Writing and Information Literacy course, or permission of instructor. GE historical study course. GE theme health and well-being course.			

4795	Seminar in History	U	3
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Advanced research and readings on selected topics in History. Prereq or concur: English 1110.xx or completion of GE Foundation Writing and Information Literacy Course, a grade of C or above in History 2800, and any 3000-level History course; or permission of instructor.

Horticulture and Crop Science

1101	Plant Parenting	U	2
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This course demonstrates how propagating, growing, and caring for plants is based on scientific principles that are appreciated by developing skills in plant parenting. By the end of the term, students should be confident in their ability to grow a wide variety of houseplants and some popular garden plants.

3100	Introduction to Agronomy	U	3
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An introductory course of row crop and forage agricultural production (agronomy). This course introduces students to row and forage crop species common in Ohio and surrounding states, and provides fundamental information on how these crops are managed in the region. Management aspects include site preparation, seasonality of management activities, and fundamentals of nutrient and pest management.

Human Nutrition

2410	Science of Human Nutrition	U	4
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Basic principles of biological science, emphasizing the interaction between nutrients and physiological (including cellular) processes. Prereq: Not open to students with credit for 2210. GE nat sci bio course. GE foundation natural sci course.

Industrial and Systems Engineering

2040.01	Engineering Economics In-Person	U	2
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Economic analysis of engineering project alternatives. Cash flow modeling; time value of money; techniques for comparing project alternatives and making solid business recommendations; influence of financial accounting and cost accounting on cash flow models. Course uses MS Excel as primary business tool for modeling. Prereq: Soph standing in Engineering or BSET program.

Kinesiology: Sport, Fitness, and Health Program

1195.01	Yoga I	U	1
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Introduction to fundamental techniques and basic yogic principles of pranayama (breath control), asana (posture), relaxation, and meditation; emphasis on major postures. Prereq: Not open to students with credit for EduPAES 195.01.

Landscape Architecture

2000	Introduction to Landscape Architecture	U	1
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Introduction to the profession of Landscape Architecture and the breadth of Landscape Architectural projects and practice. This course is graded S/U.

Materials Science and Engineering

2010	Introduction to Engineering Materials	U	3
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Introduction to the properties (mechanical, electrical, thermal, diffusive, degradative, magnetic, optical), structure, and processing of engineering materials, including ceramic, metals, polymers, biological, and composite materials. Prereq: Physics 1250 or 1260; and Math 1151, 1161, or 1154 and enrollment in BSET program; and Chemistry 1210 or 1250 or 1910H; or permission of instructor.

Mathematics

1050	Precollege Mathematics I	U	5
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Fractions and decimals, basic algebra, graphing lines, factoring, systems of equations. Credit for this course will not count toward graduation in any degree program. Prereq: 1040 (040) or 050, or Math Placement Level T, or permission of department. Not open to students with credit for any Math course above 1050 (050). This course is available for EM credit.

1075	Precollege Mathematics II	U	4
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Algebraic, rational, and radical expressions; functions and graphs; quadratic equations; absolute value; inequalities; and applications. Credit for this course will not count toward graduation in any degree program. Prereq: 1074 or 075; or a grade of C- or above in 1050; or Math Skills Assessment Level R or S; or ACT math subscore of 22 or higher that is less than 2 years old. Not open to students with credit for any Math course above 1075, except for 1116; or for any quarter-system course above 075, except for 116. This course is available for EM credit. GE quant reason basic computation course.

1116	Excursions in Mathematics	U	3
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Critical thinking and problem solving, with relevant topics met in everyday life. Appropriate for non-science majors. Prereq: 1073, 1074, 1075, 75, or 104; or Math Placement Level R or above; or ACT math subscore of 22 or higher that is less than 2 years old. Not open to students with credit for 1152 (153) or above. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1120	Precalculus with Review I	U	5
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This is the first course of a two course sequence covering precalculus. In this first course, topics covered will include an introduction to functions (linear, polynomial and rational), equations and inequalities along with appropriate review. This course is designed with an emphasis on reviewing these fundamental basic algebra skills as they apply to precalculus in a just-in-time manner. Prereq: A grade of C- or above in 1075; or grade of B- or above in 1050; or Math Placement level R. Not open to students with credit for 1121 or above. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1121	Precalculus with Review II	U	5
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This is the second course of a two course sequence in precalculus. In this second course, topics covered will include an introduction to functions (exponential, logarithmic, trigonometric), equations, inequalities and right-angle trigonometry with appropriate review. This course has an emphasis on reviewing fundamental basic algebra skills as they apply to precalculus in a just-in-time manner. Prereq: A grade of C- or above in 1120. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1130	College Algebra for Business	U	4
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Algebraic, exponential, and logarithmic functions. Matrix algebra. Applications to business.

Prereq: A grade of C- or above in 1075, or credit for 104, or Math Placement Level M or N, or ACT math subscore of 22 or higher that is less than 2 years old. Not open to students with credit for 1131 (131), or for any Math course numbered 1149 (150) or above. This course is available for EM credit. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1131	Calculus for Business	U	5
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Survey of calculus of one and several variables; applications to business. Prereq: A grade of C- or above in 1130, 1144, 1148, or 1150, or credit for 130, 148, or 150, or Math Placement Level L. Not open to students with credit for 1151 (151) or above, or 1134 (132). This course is available for EM credit. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1135	Number and Operations for Teachers	U	5
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The first course in a two semester sequence for teachers of elementary and middle grade students. This course focuses on concepts of numbers and arithmetic operations, including modern and historical perspectives. Prereq: A grade of C- or above in 1075; or credit for 1074, 75, or 104; or Math Placement Level R or above; or ACT math subscore of 22 or higher that is less than 2 years old. Not open to students with credit for 106.

1136	Measurement and Geometry for Teachers	U	5
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This course is the second in a two semester sequence for teachers of elementary and middle grade students. This course focuses on concepts of measurement and geometry, including modern and historical perspectives. Prereq: A grade of C- or above in 1135.

1148	College Algebra	U	4
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Functions: polynomial, rational, radical, exponential, and logarithmic. Introduction to right-angle trigonometry. Applications. Prereq: A grade of C- or above in 1075, or credit for 104 or 148, or Math Placement Level N, or ACT math subscore of 22 or higher that is less than 2 years old, or permission of department. Not open to students with credit for 1144, or for Math courses numbered 1150 (150) or above. This course is available for EM credit. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1149	Trigonometry	U	3
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Trigonometric functions and their properties. Vectors, polar coordinates and complex numbers. Prereq: A grade of C- or above in 1148, or permission of department. Not open to students with credit for 1144, or for any Math course numbered 1150 (150) or above. This course is available for EM credit. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1150	Precalculus	U	5
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Functions: polynomial, rational, radical, exponential, logarithmic, trigonometric, and inverse trigonometric. Applications. Prereq: Math Placement Level M. Not open to students with credit for 1144, 1148, or for 1149 or above, or for any quarter Math course numbered 150 or above. This course is available for EM credit. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

1151	Calculus I	U	5
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Differential and integral calculus of one real variable. Prereq: A grade of C- or above in 1148 and 1149, or in 1144, 1150, or 150, or Math Placement Level L. Not open to students with credit for 1152 or 152.xx, or above. This course is available for EM credit. GE quant reason math and logical any course. GE foundation math and quant reasoning or data anyl course.

10 Mathematics

1154	Calculus I for Engineering Technology	U	4
Calculus I for Engineering Technology is the first in a two-course calculus sequence specifically designed for Engineering Technology. It covers standard Calculus topics including limits, differentiation, integration, optimization, and approximation with an emphasis on building mathematical intuition, problem solving ability and using appropriate technology to find solutions.Prereq: A grade of C- or above in 1148 and 1149, or grade of C- or above in 1144 or 1150, or Math Placement Level L. Not open to students with credit for 2153 or above.			
1155	Calculus II for Engineering Technology	U	4
Calculus II for Engineering Technology is the second in a two-course calculus sequence specifically for Engineering Technology. It covers standard Calculus topics including related rates, Taylor Polynomial approximations, differential equations and functions of several variables with an emphasis on building mathematical intuition, problem solving and using appropriate technology to find solutions.Prereq: A grade of C- or above in 1154.			
1172	Engineering Mathematics A	U	5
Techniques of integration, Taylor series, differential calculus of several variables. Applications.Prereq: A grade of C- or above in 1114 (114), 1151, 1156, 1161.xx, 152.xx, 161.xx, or 161.01H. Not open to students with credit for 1152, 1534 (153.xx), or 1544 (154), or for any Math class numbered 1172 or above, or for any quarter-system Math class numbered 254.xx or above. Not open to students majoring in Math, pre-Actuarial Science, or Actuarial Science. This course is available for EM credit.			
1193	Individual Studies in Mathematics	U	1 - 3
Individual studies. Prereq: Permission of department. Repeatable to a maximum of 6 cr hrs or 2 completions. This course is graded S/U.			
2138	Calculus and its History for Teachers	U	3
This is one of two independent courses which follow Math 1136 to provide necessary content for middle grade teachers. This course focuses on functions and calculus, including modern and historical perspectives. Prereq: A grade of C- or above in 1136; and a grade of C- or above in 1149 or 1150, or credit for 150, or math placement level L.			

Microbiology

4000.01	Basic and Practical Microbiology	U	4
Provides an understanding of microorganisms and their interaction with the human experience.Prereq: 3 cr hrs in Biology. Not open to students with credit for 4000 or 4000.02. GE nat sci bio course. GE foundation natural sci course.			

Molecular Genetics

4500.01	General Genetics	U	3
The principles of genetics, including molecular genetics, transmission genetics of prokaryotes and eukaryotes, developmental and non-chromosomal genetics, recombinant DNA and genomics, and the genetics and evolution of populations. Taught in person.Prereq: Biology 1101, 1113, or 1113H, and 3 additional sem cr hrs in Biological Sciences. Not open to students with credit for 4500, 4500.02, or 4606.			

Music

2031	The Informed Beginning Pianist	U	3
This course is designed for people with little or no musical background who want to learn how to play piano and gain valuable insights into how piano music has shaped cultural values and norms. GE VPA course. GE foundation lit, vis and performing arts course.			
2032S	Drumming for Wellness	U	4
Students will learn research, theories, skills, and techniques relevant to the use of music in settings in which the focus is to assist in the rehabilitation, treatment, or well-being of people with motor disorders and their caregivers. Course will not count as an elective for music degree programs.GE theme health and well-being course.			
2203.03	University Chorus	U	½ - 2
Selected choral works are studied and performed. Prereq: Admission by audition only. Repeatable to a maximum of 16 cr hrs or 8 completions. VSP Admis Cond course.			
2251	The World of Classical Music	U	3
An introduction to the world of classical music and to its genres, composers, styles, societies, and historical periods. No music background is required.Prereq: Not open to Music majors. GE VPA and diversity global studies course. GE foundation lit, vis and performing arts course.			
2251E	The World of Classical Music	U	3
An introduction to the world of classical music and to its genres, composers, styles, societies, and historical periods. No music background is required. Music 2251E is an honors embedded course.Prereq: Honors standing or permission of instructor. Not open to students with credit for 251 or Music majors. GE VPA and diversity global studies course. GE foundation lit, vis and performing arts course. VSP Admis Cond course.			

3364	Musical Citizenship: Activism, Advocacy and Engagement in Sound	U	3
This course examines the sonic expressions of people's status, identity, rights, and duties as political subjects across multiple scales of place. We will consider the value of cultural advocacy in the public sector and social activism in the public sphere and the importance of partnering with (non)governmental institutions, community organizations, and grassroots affiliates to advance musical art.GE VPA and diversity global studies course. GE theme citizenship for div and just wrld course.			
3370	Music for Elementary Teachers	U	2
Music literature and teaching aids for children, including singing, rhythmic, creative, and listening experiences, and their presentation.			

Philosophy

1100	Introduction to Philosophy	U	3
Examination of major problems, such as the nature of reality, knowledge, truth, morality, and the relation of philosophy to science and religion.GE cultures and ideas course. GE foundation historical and cultural studies course.			
1300	Introduction to Ethics	U	3
The nature of right and wrong, good and evil; the grounds of moral choice and decision; the resolution of moral conflicts.Prereq: GE cultures and ideas course. GE foundation historical and cultural studies course.			
1332	Ethics in the Professions: Introduction to Engineering Ethics	U	3
An examination of contemporary issues in engineering ethics in the context of major ethical theories.Prereq: Not open to students with credit for 1300. GE cultures and ideas course. GE foundation historical and cultural studies course.			
1420	Philosophical Approaches to Racism and Sexism	U	3
An introductory survey of philosophical ways of thinking about and remedying racism and sexism.GE foundation race, ethnicity and gender div course.			
1500	Introduction to Logic	U	3
Deduction and induction; principles of clear statement and valid reasoning; fallacies; and the methods by which theories and laws are established.Prereq: Math 1060 or 1075 or equiv; or an ACT Math subscore of 22 or higher; or Math Placement Level R or better. Not open to students with credit for 1500.01, 1500.02, or 1501. GE quant reason math and logical anly course. GE foundation math and quant reasoning or data anly course.			
2340	The Future of Humanity	U	3
Examination of long-term ethical challenges facing humanity due to technological, environmental, and other developments.GE cultures and ideas course. GE theme sustainability course.			
3430	The Philosophy of Sex and Love	U	3
This course will explore both historical and contemporary philosophical perspectives on both sex and love, and the many ways in which sex and love are integral to human health and well-being.Prereq: Completion of GE Foundation Writing and Information Literacy course and GE Foundation Historical and Cultural Studies course, or permission of instructor. GE theme health and well-being course.			

Physics

1200	Mechanics, Kinematics, Fluids, Waves	U	5
Algebra-based introduction to classical physics: Newtons laws, fluids, waves.Prereq: A grade of C- or above in Math 1120 or 1148, or Math Placement Level M. This course is available for EM credit. GE nat sci phys course. GE foundation natural sci course.			
1201	E&M, Optics, Modern Physics	U	5
Algebra-based introduction to electricity and magnetism, simple optics, overview of modern physics including special relativity and quantum mechanics. Prereq: 1200 (111). Not open to students with credit for 112. This course is available for EM credit. GE nat sci phys course. NS Admis Cond course.			
1231	Physics for Engineering Technology: Electricity and Magnetism	U	3
Calculus-based introduction to electricity and magnetism, for students in Engineering Technology.Prereq: 1250, 1250H, or 1260; and Math 1141 or 1151 or 1154 or above; or permission of instructor. Concur: Math 1152, 1155, 1158, 1161, 1172, 1181H, or 4181H. Not open to students with credit for 1251. This course is available for EM credit. GE nat sci phys course.			
1250	Mechanics, Work and Energy, Thermal Physics	U	5
Calculus-based introduction to classical physics: Newton's laws, work and energy, fluids, thermodynamics; for students in physical sciences, mathematics, and engineering.Prereq or concur: Math 1141, 1151, 1154, 1156, 1161, 1181H, or 4181H. This course is available for EM credit. GE nat sci phys course. GE foundation natural sci course.			

1251	E&M, Waves, Optics, Modern Physics	U	5
Calculus-based introduction to electricity and magnetism, waves, simple optics, and quantum mechanics; for students in physical sciences, mathematics, engineering.Prereq: 1250, 1250H, 1260, or 1270; and Math 1141, 1151, 1154, or above; or permission of instructor. Concur: Math 1152, 1155, 1161, 1172, 1181H, or 4181H. This course is available for EM credit. GE nat sci phys course.			

Political Science

1100	Introduction to American Politics	U	3
Introduction to American politics, the institutions and processes which create public policy, the strengths and weaknesses of the American political systems.Prereq: Not open to students with credit for 3100 (300), 101, or 101H. This course is available for EM credit. GE soc sci orgs and politics course. GE foundation social and behavioral sci course. SS Admis Cond course.			
1165	Introduction to Politics	U	3
Introduction to politics and political science: power, democracy and authoritarianism, political participation, the state, political institutions, subfields of the discipline, and political research methodology.Prereq: Not open to students with credit for 165 or 165H. GE soc sci orgs and politics course. GE foundation social and behavioral sci course. SS Admis Cond course.			
4170	Gender and Politics	U	3
An examination of women's participation in political activity, including changes over time in women's political roles and comparison with the roles of men. Prereq: Not open to students with credit for 512.			

Psychology

1100	Introduction to Psychology	U	3
A prerequisite to advanced courses; a broad survey of psychological science. Application of the scientific method to the empirical study of behavior with emphasis on individual and cultural differences.Prereq: Not open to students with credit for 100, 1100H (100H) or 1100E (100E). This course is available for EM credit. GE soc sci indivs and groups and diversity soc div in the US course. GE foundation social and behavioral sci course.			
1100E	Introduction to Psychology	U	3
A prerequisite to advanced courses; a broad survey of psychological science. Application of the scientific method to the empirical study of behavior with emphasis on individual and cultural differences.Prereq: Honors standing, or permission of instructor. Not open to students with credit for 1100 or 1100H. GE soc sci indivs and groups and diversity soc div in the US course. GE foundation social and behavioral sci course.			
2220	Data Analysis in Psychology	U	3
Discussion of statistical analysis of psychological data - random samples, graphical and numerical techniques of descriptive statistics, correlation, regression, probability, sampling distribution, and hypothesis testing.Prereq: 1100 or 1100H, and Stat 1450, Math 1120, 1130, 1148, 1149, 1150, or 1151, or equiv, or Math Placement Level M or higher; or permission of instructor.			
2300	Research Methods in Psychology	U	3
An overview of issues, methods, and techniques of scientific psychological research. Students must be pursuing majors or minors in Psychology.Prereq: 1100 or 1100H.			
2301	Psychology of Extraordinary Beliefs	U	3
Considers beliefs in extraordinary phenomena through the application of the findings and principles of psychological science. Prereq: Not open to students with credit for 301.			
2367.01	Social Psychology	U	3
Survey of group processes as they affect individual behavior; topics include individual motivation, group behavior, attitudes, and perception of self and others. Prereq: 1100 (100) or 1100H (100H), and English 1110.01, 1110.01H, 1110.02, 1110.02H, 1110.03, 110, or 111, or equiv, and Soph standing or above. Not open to students with credit for 3325 (325), 3325H (325H), or 367.01. GE writing and comm: level 2 and soc sci indivs and groups course.			
2376	Interpersonal Relationships	U	3
Surveys the scientific literature on interpersonal relationships, including family, friends, and romantic partnerships.			
3310	Sensation and Perception	U	3
Examination of how observers perceive their environment through sensory information; emphasis on major sensory systems including vision, audition, spatial orientation, touch, taste, and olfaction.Prereq: 1100 or 1100H.			
3312	Memory and Cognition	U	3
An introduction to experimental study of human memory and cognition.Prereq: 1100 or 1100H.			
3313	Introduction to Behavioral Neuroscience	U	3
Introduction to the structure and function of the nervous system in relation to behavior.Prereq: 1100 or 1100H.			

3331	Abnormal Psychology	U	3
Examination of current theories and empirical findings regarding the major forms of psychopathology and treatment.Prereq: 1100 or 1100H. Not open to students with credit for 2367.02, 3331H, or 3331E.			

3340	Introduction to Life Span Developmental Psychology	U	3
Consideration of theories and research on psychological development across the lifespan; includes consideration of social policies that influence developmental outcomes.Prereq: 1100 or 1100H.			

3340E	Introduction to Life Span Developmental Psychology	U	3
A survey of developmental psychology including some phylogenetic perspective. Prereq: Honors standing, and 1100 (100) or 1100H (100H); or permission of instructor. Not open to students with credit for 340, 340H, or 340E.			

3375	Stereotyping and Prejudice	U	3
Lectures address experimental research in stereotyping and prejudice; readings focus on historical, cultural, and sociological perspectives on issues related to gender, ethnicity, and social class.Prereq: 1100 or 1100H. GE diversity soc div in the US course.			

3550	Psychology of Childhood	U	3
Introduction to the major phenomena, methods, theories, and findings of developmental psychology, especially as they apply to infancy and childhood. Prereq: 1100 (100) or 1100H (100H). Not open to students with credit for 550 or 550H.			

4475	The Self	U	3
Survey of classic and contemporary theory and research on social psychological study of the self; diverse approaches, and various gender, ethnic, and cross-cultural perspectives.Prereq: A grade of C- or above in 2220, 2300, and 2367 prior to SU13, 2367.01, 3325, 3325H, or 3375. Not open to students with credit for 475.			

4510	Cognitive Psychology Laboratory	U	3
Training in experimental and quantitative methods in cognitive psychology; laboratory experiments include topics such as memory, perception, and attention.Prereq: A grade of C- or above in 2220 and 2300; and a grade of C- or above in 3302, 3310, or 3312; and enrollment in Psych major. Not open to students with credit for 4520.			

4531	Health Psychology	U	3
Introduction to health psychology; health-promoting and health-damaging behaviors; modification of health behaviors; stress and coping; management of illness; stress management strategies.Prereq: A grade of C- or above in 2220 and 2300. Not open to students with credit for 531.			

4543	Psychology of Gender	U	3
An examination of the origins and implications of gender differences and similarities and the role that gender plays in the interpretation of behavior.Prereq: A grade of C- or above in 2220 and 2300. Not open to students with credit for 4543E.			

4571	Psychology of Developmental Disabilities	U	3
Overview of developmental disabilities including causes, nature, and psychological characteristics; diagnosis and psychometric assessments; and behavioral, psycho-educational, and biological forms of prevention and intervention. 20-hr off-campus practicum req.Prereq: A grade of C- or above in 2220 and 2300.			

4998	Undergraduate Research in Psychology	U	1 - 5
Supervised collaborative research in psychology. Prereq: Permission of instructor. Repeatable to a maximum of 15 cr hrs or 8 completions. This course is graded S/U.			

Religious Studies

2370	Introduction to Comparative Religion	U	3
Introduction to the academic study of religion through comparison among major traditions (Judaism, Christianity, Islam, Hinduism, Buddhism, etc.) and smaller communities.Prereq: English 1110 or equiv. Not open to students with credit for 2370H or CompStd 2370H or 2370. GE cultures and ideas and diversity global studies course. GE foundation historical and cultural studies and race, ethnicity and gender div course.			

Social Work

1120	Introduction to Social Welfare	U	3
An introduction to the history, structure, and function of the social welfare institution.Prereq: Not open to students with credit for 220 or 520. GE soc sci human, nat, and econ resources course. GE foundation social and behavioral sci course.			
1130	Introduction to Social Work in Contemporary Society	U	3
An introduction to the core values, fundamental goals, unique functions and methods of the social work profession.Prereq: Not open to students with credit for 230. GE soc sci indivs and groups course. GE foundation social and behavioral sci course.			

Social Work

1140	Issues in Social Justice: Race, Gender and Sexuality	U	3
Examines the history of social oppression directed at certain minority populations in the United States and its impact on their current opportunities and lived experiences. The primary purpose is to analyze how racism, sexism, heterosexism and institutionalized discrimination based on ethnicity affect the social welfare and well-being of those living in the United States.GE diversity soc div in the US course. GE foundation race, ethnicity and gender div course.			
2110	Sport and Positive Youth Development	U	3
This course focuses on how characteristics of individuals, families, peer systems, schools, neighborhoods & other environmental contexts contribute to the development of social, academic, & health-related problems among youth. Students will apply the knowledge & skills of generalist practice to the design and delivery of prevention and youth development programs in sport/recreation/play settings.GE theme health and well-being course.			
3101	Professional Values and Ethics	U	3
Introduction to the NASW Code of Ethics, ethical theory, and ethical issues and dilemmas that confront professional social workers. Prereq: Enrollment in SocWork major. Not open to students with credit for 690.			
3201	Social and Economic Justice: Strategies for Social Work	U	3
Introduces students to social and economic justice and injustice and presents multiple strategies to pursue social justice, with a particular emphasis on the role of advocacy.Prereq: 1120, and enrollment in SocWork major.			
3301	Lifespan Development in Social Work	U	3
Explores human development across the lifespan, with an emphasis on conceptualizing individuals holistically, taking into account factors from various theories that may have relevance to each age group. Offers information about the importance of understanding lifespan development in social work, basics of lifespan development, research and the scientific method, and major theories and theorists.			
3401	Research & Statistics for Understanding Social Work Problems and Diverse Populations	U	3
This is the first course in the BSSW program sequence preparing students to effectively work with research evidence and statistics as social work professionals. Students will develop the requisite skills and knowledge for beginning to identify, assess, and apply existing bodies of evidence to answer questions about social work problems and diverse populations.Prereq or concur: Math 1060 or 1075 or above, or Stat 1450 or above, or Math Placement Level R or above; and admission to the Social Work major. Not open to students with credit for 3401E.			
3402	Research & Statistics for Understanding Social Work Interventions	U	3
This is the second course in the BSSW program sequence preparing students to effectively work with research evidence and statistics as it applies to social work interventions at multiple levels. Students will develop the requisite skills and knowledge for beginning to identify, assess, and apply research evidence to inform and evaluate social work practices at multiple levels of intervention.Prereq: 3401.			
3501	Engagement and Interviewing Skills	U	3
Addresses interviewing skills critical to social work. Didactic and experiential methods will provide a foundation for practice and facilitate entry into the field. Prereq: Jr or Sr standing, and enrollment in SocWork major.			
3502	Generalist Practice with Individuals	U	4
Introduces students to the theories, knowledge and skills of generalist social work practice, with an emphasis on work with individuals. The content provides didactic and experiential learning of generalist practice skills that will facilitate and enhance the student's entry into the senior year field practicum and will serve as a foundation for entry level professional practice.Prereq or concur: 3501.			
3503	Social Work Practice with Diverse Populations	U	3
Foundation knowledge and a social work perspective for working with diverse populations, especially those who are oppressed and marginalized.Prereq: 1140, or any Race, Ethnicity and Gender Diversity GE course. Prereq or concur: 3501.			
3600	Introduction to Psychopathology and Social Work Practice	U	3
This course will familiarize students with the major mental disorders, offer strategies for building on clients' strengths and resilience, provide basic tools for screening and referral, and impart knowledge of the mental health delivery system and its resources.Prereq: Admission to SocWork major.			
4188.01	Undergraduate Field Seminar	U	1
Integration of knowledge and practice; problem solving and discussion of social work practice issues, values, and ethics. Taken concurrently with field practicum.Prereq: 3502. Concur: 4189. Repeatable to a maximum of 2 or hrs.			
4189	Field Practicum	U	5
Internship in a social work agency. Students integrate classroom knowledge and skills with practice experiences.Prereq: 3502. Concur: 4188.01 or 4188.02. Repeatable to a maximum of 10 or hrs. This course is graded S/U.			
4193	Individual Studies	U	1 - 3
Individual study projects in selected areas of social work and social welfare. Prereq: 6 cr hrs in SocWork or related courses, and approval of instructor. Repeatable to a maximum of 6 cr hrs or 6 completions. This course is graded S/U.			

4501	Generalist Practice with Families	U	3
This course addresses professional values, knowledge, and skills essential for effective generalist social work practice with families. Emphasis is placed on family theory, models, and strategies for intervention, practice skills, and ethics necessary for beginning practice in social service agencies. The development of culturally competent practice is an integral part of this course.Prereq: 3502.			
4502	Generalist Practice with Groups	U	3
Application of professional values, knowledge, and skills essential for effective generalist social work practice with small groups. Prereq: 3502 (645). Not open to students with credit for 646.			
4503	Generalist Practice with Larger Systems	U	3
Application of professional values, knowledge, and skills essential for effective generalist social work practice with organizations and communities.Prereq: 4502. Not open to students with credit for 647.			
5013	Integrative Body-Mind-Spirit	U G	2
Introduces knowledge and skills regarding assessment and treatment techniques pertaining to a holistic approach of mind, body, and spirit treatment. Prereq: Jr, Sr, or Grad standing in SocWork, or permission of department.			
5024	Social Work Licensure Exam Strategies and Skills	U G	2
Course provides instruction on test taking strategies and developing a study plan and learning content and strategies to pass the Bachelors/Masters level licensure exam. Instruction and a five-volume AATBS study guide provided. All content reflects the changes in the Ohio Social Worker rules and provides students with access to multiple online, full-length practice tests in study and exam modes.Prereq: Sr or Grad standing in Social Work. This course is graded S/U.			
5030	Global Social Work Perspectives on Poverty and Inequality	U G	3
This course examines the nature and dimensions of poverty and inequality in the U.S. and across the world, considers individual and social consequences of poverty, and examines historic and contemporary approaches to ameliorating poverty including review of major poverty and social welfare policy and programs. Focuses on helping students understand why poverty matters to social workers.Prereq: Soph, Jr, Sr, or Grad standing, or permission of department. GE theme migration, mobility, and immobility course.			
5805	Theories and Biological Basis of Substance Misuse	U G	3
The focus of this course is to explore traditional and contemporary theories, and their supporting evidence, related to substance misuse and the etiology of substance use disorders (including addiction). Satisfactory completion of introductory psychology and introductory biology course content is preferable/recommended, but not required.Prereq: Jr, Sr, or Grad standing; or permission of instructor. Not open to students with credit for 3805.			
5806	Diagnosis and Treatment of Substance Use Disorders	U G	3
The focus of this course is to introduce concepts and current issues related to screening, assessment, diagnosis, and treatment for individuals with potential substance use disorders. It is also designed to meet chemical dependency educational content for Ohio's Licensed Chemical Dependency Counselor credentials.Prereq or concur: 3805 or 5805.			

Sociology

1101	Introductory Sociology	U	3
Fundamental concepts of sociology and introduction to the analysis of social problems and interactions (e.g. wealth, gender, race, inequality, family, crime) using sociological theories.Prereq: Not open to students with credit for 1101H, 1101E, RurlSoc 1500, or equiv. GE soc sci orgs and politics and diversity soc div in the US course. GE foundation social and behavioral sci course.			
2209	Introduction to Criminal Justice	U	3
Examination of the development and administration of criminal law and agencies (police, courts, corrections); emphasis on criminal proceedings and their justification.GE foundation social and behavioral sci course.			
2463	Social Inequality: Race, Class, and Gender	U	3
The study of social inequality with a focus on inequalities by race/ethnicity, gender, and class.Prereq: Not open to students with credit for 3463. GE soc sci human, nat, and econ resources course. GE foundation race, ethnicity and gender div course.			
3410	Criminology	U	3
Theories of delinquency, crime, and criminal careers; scientific aspects of crime measurement.			

Spanish

1101	Spanish I	U	4
Development of listening, reading, speaking, and writing skills in cultural contexts. Not open to native speakers of this language through regular course enrollment or EM credit or to students with 3 or more years of high school Spanish. Students with 1+ years of high school Spanish must take the MultiCAT placement exam.Prereq: Not open to students with credit for 1101.01, 1102, 1102.01, 1103, 1103.01, 1113, 1155, or equiv. courses. This course is available for EM credit. GE for lang course. GE world languages course.			

1102	Spanish II	U	4
Further development of listening, reading, speaking, and writing skills in cultural contexts. Both classroom-based and 100% online sections available each semester. Not open to native speakers of this language through regular course enrollment or EM credit.Prereq: 1101 or 1101.01. Not open to students with credit for 1102.01, 1103.01, 1103.51, 1155, or equiv. courses. This course is available for EM credit. GE for lang course. GE world languages course.			
1103	Spanish III	U	4
Continuing development of listening, reading, speaking, and writing skills in cultural contexts. Both classroom-based and 100% online sections available each semester. A grade of C- or above is required to continue to 2202. Not open to native speakers of this language through regular course enrollment or EM credit.Prereq: 1102 or 1155 or equiv. Not open to students with credit for 1103.01, 1103.51, 2202.01, or 2202.51. This course is available for EM credit. GE for lang course.			
2151	Latin American Culture and Literature	U	3
Introduction to the culture of Spanish America and Brazil through literature, art, music, film, and folklore.Prereq: Not open to students with credit for 151. GE cultures and ideas and diversity global studies course. GE foundation historical and cultural studies course.			

Statistics

1350.01	Elementary Statistics	U	3
Introduction to probability and statistics, experiments, and sampling, data analysis and interpretation.Prereq: Math 1050, or Math Placement Level S, or permission of instructor. Not open to students with credit for GE Data Analysis course (AEDEcon 2005, AnimSci 2260, Astron 3350, Chem 2210, 2210H, ComLdr 3537, EarthSc 2245, Econ 3400, ENR 2000, Geog 2200.01, 2200.02, HCS 2260, IntStds 3400, Ling 2051, 2051H, Philos 1520, Physics 3700, PolitSc 3780, 4781, Sociol 3549, Stat 1350, 1350.01, 1430, 1430.01, 1430.02, 1430H, 1450, 1450.01, 1450.02, 2450, 2450.01, 2450.02, 2480, 2480.01, 2480.02, 3450, 3450.01, 3450.02, 3460, 3470, 3470.01, 3470.02, 4202, 5301, or 5302). GE data anyl course. GE foundation math and quant reasoning or data anyl course.			
1430.01	Statistics for the Business Sciences	U	4
Fundamentals of probability and statistics: Data collection and summaries, random variables, simple linear regression, two-way tables, conditional probability, sampling distributions, confidence intervals, hypothesis tests, analysis of variance. In-person recitation.Prereq: Math 1131, 1141, 1151, 1156, 1161.xx, or 1181H, or permission of instructor. Not open to students with credit for 1430, 1430.02, or BusMgt 2320. GE data anyl course. GE foundation math and quant reasoning or data anyl course.			
1450.01	Introduction to the Practice of Statistics	U	3
Algebra-based introduction to data analysis, experimental design, sampling, probability, inference, and linear regression. Emphasis on applications, statistical reasoning, and data analysis using statistical software.Prereq: Math 1116 or 1130 or above, or Math Placement Level L or M, or permission of instructor. Not open to students with credit for 1450, 1450.02, 2450, 2450.01, 2450.02, 2480, 2480.01, or 2480.02. GE data anyl course. GE foundation math and quant reasoning or data anyl course.			
3440	Statistics in Quality	U	3
Descriptive statistics; introduction to probability; Bayes theorem; discrete and continuous random variables, expected value, probability distributions; interval estimation for means and proportions; hypotheses tests for means and proportions; least squares regression; one- and two-way anova; control charts; process capability indices.Prereq: Math 1152, 1154, 1155, 1161.xx, 1172, or equiv, or permission of instructor. Not open to students with credit for 3450, 3450.01, 3450.02, 3460, 3470, 3470.01 or 3470.02.			

Theatre

2000.11	Technical Production Practicum: Box Office	U	1
Provides experience in technical production activities. Repeatable to a maximum of 6 cr hrs or 6 completions.			
2100	Introduction to Theatre	U	3
A study of the art and profession of theatre, with an emphasis on evaluating and appreciating live performance, theatre's cultural importance, and its relationship to issues of social diversity. Students study performance conventions, texts, & spaces from ancient times to present day. While not an acting class, students get firsthand experience in the collaborative process of theatre creation.Prereq: Not open to students with credit for 2100H or 2101H. GE VPA and diversity soc div in the US course. GE foundation lit, vis and performing arts course.			
2211	Introduction to Production Design	U	3
Introduction to design for theatre and live events including scenic, costume, lighting, sound, and media design.GE foundation lit, vis and performing arts course.			
2700	Criticizing Television	U	3
A critical analysis of a wide variety of television programs through viewing, discussing, reading, and writing. Students will focus on the ways in which racial, ethnic, and gender diversity issues are represented on television.Prereq: Not open to students with credit for 2367.03, ArtEduc 2367.03, or 2700. GE writing and comm course: level 2 and diversity soc div in the US course. GE foundation writing and info literacy and race, ethnicity and gender div course. Cross-listed in ArtEduc.			

2811	The Craft of Acting	U	3
An introductory acting class exploring the basic techniques of imagination, concentration, character development, and script analysis through work on monologues, scenes, and plays.Prereq: Not open to students with credit for 280. GE VPA course. GE foundation lit, vis and performing arts course.			
3000	Production Run Crew Practicum	U	1 - 2
Students in this course will serve as production technicians as part of the running crew for a theatre production. Each student will receive training for their specific role which may focus on lighting, costumes, media, sound, properties or scenery. No conventional class meetings, only one orientation meeting and three weeks of evening/weekend productions.Repeatable to a maximum of 8 cr hrs or 4 completions.			
3111	Stage Directing	U	3
An introduction to the basic principles, techniques and challenges of directing for the stage.Prereq: 2811.			
4000.08	Practicum: Acting	U	1 - 3
Individual theatrical performance and production activities at an advanced level under faculty supervision. Prereq: Permission of instructor, by audition. Repeatable to a maximum of 18 cr hrs or 8 completions.			
4000.09	Practicum: General	U	1 - 3
Individual theatrical performance and production activities at an advanced level under faculty supervision. Prereq: Permission of instructor. Repeatable to a maximum of 18 cr hrs or 8 completions.			
4191	Internship in Theatre	U	1 - 12
A cooperative education or internship assignment conducted under the supervision of a faculty member. Prereq: Permission of instructor. Repeatable to a maximum of 36 cr hrs or 3 completions. This course is graded S/U.			
5961	Playwriting	U G	3
Students will write 10-minute plays as exploratory exercises, analyze contemporary plays to deepen familiarity with the theatrical form, and, as a final project, write a one-act play which will receive a staged reading. Seminar and Workshop.			

Women's, Gender, and Sexuality Studies

1110	Gender, Sex and Power	U	3
Introduces students to the study of gender, sex, and power. We will draw on a variety of literatures to analyze gender, race, sexuality, and other identities. We will place the study of US women in broader transnational contexts.GE cultures and ideas and soc sci indivs and groups and diversity soc div in the US course. GE foundation historical and cultural studies and social and behavioral sci and race, ethnicity and gender div course.			
2282	Introduction to Queer Studies	U	3
Introduces and problematizes foundational concepts of the interdisciplinary field of queer studies, highlighting the intersections of sexuality with race, class, and nationality.Prereq: Not open to students with credit for English 2282. GE cultures and ideas and diversity soc div in the US course. GE foundation historical and cultural studies and race, ethnicity and gender div course. Cross-listed in English.			