

# UW-FOX VALLEY COURSE DESCRIPTIONS

**ANT 100 General Anthropology 3 cr** A survey of the subfields of anthropology, especially archaeology and physical and cultural anthropology. The course explores human biological evolution and variation, cultural evolution, language, and culture change. SS

**ANT 102 Archaeology and the Prehistoric World 3 cr** Introduction to the prehistoric world from origins of human culture to the beginnings of written history as revealed by archaeological research at great sites and ruins around the globe. Archaeological analysis of famous prehistoric sites as case studies to illustrate concepts and techniques used by archaeologists in their efforts to understand the rise, florescence and demise of vanished societies. SS

**ANT 104 Cultural Anthropology 3 cr** Survey of cultural anthropology with emphasis on ethnographic description, methodology and contemporary theory. Cross-cultural comparisons of societies and institutions. Course includes both humanistic and social scientific approaches to human sociocultural diversity. SS

**ANT 105 Introduction to Physical Anthropology 4 cr** Survey of cultural anthropology with emphasis on ethnographic description, methodology and contemporary theory. Cross-cultural comparisons of societies and institutions. Course includes both humanistic and social scientific approaches to human sociocultural diversity. SS

**ANT 299 Independent Reading and Research 2 cr** Independent reading and research in anthropology. Prereq: cons. instr.\*

**ANT 303 Human Skeleton 3 cr** Individual bones and teeth, possibly including ancient as well as modern specimens; sex and age differences; continuous & discontinuous morphological variation of geographically & ethnically diverse populations; stature reconstruction; forensic aspects of individual identification; lab training in observations, measurements and analysis; LEC/LAB. Prereq: cons. instr. LS/NS

**ANT 343 3 cr Religion Magic and Witchcraft** Religion magic and witchcraft are uniquely human means of reaching out to the supernatural realm in order to effect changes in the here and now. This course introduces student to descriptions and interpretations of magico-religious beliefs and practices in a variety of cultures from an anthropological perspective which does not attempt to judge the validity of such beliefs but to understand their origins and functions among other things. It examines theories about religion and some of the conceptual issues regarding the interpretation of religion and related phenomena which have interested anthropologists over time. Prereq: Not recommended for first semester students. SS

**ART 101 Introduction to Drawing 3 cr** Principles of creative and structural drawing; a Foundation course that explores a variety of ideas, techniques, and materials with a perceptual focus; drawing as a fine art and a basis for structure. An investigation of methods and materials. LEC/LAB. AP

**ART 102 Intermediate Drawing 3 cr** Principles of creative and structural drawing; a second semester foundation course that explores a variety of ideas, techniques, and materials with a perceptual focus; drawing as a fine art and a basis for structure. Studio work in drawing with a variety of materials, techniques, and ideas. An investigation of methods, materials and mixed media possibilities. An intro to figure drawing. The class is conceptually based with an involvement and emphasis on structure, ideas, & process. LEC/LAB. Prereq: ART101. AP

**ART 103 Drawing II 3 cr** Advanced drawing problems of expression

and form. Emphasis on both skill and creative expression. Prereq: ART 102. LEC/LAB. AP

**ART 111 2 Dimensional Design 3 cr** Investigation of the basic elements and principles of two-dimensional design; arrangement of line, value, texture, and color theory, with possible computer exercises.

**ART 112 3 Dimensional Design 3 cr** Investigation of the basic elements and principles of three-dimensional design; in the use of volume and spatial arrangement. LEC/LAB. AP

**Art 121 Introduction to Painting 3 cr** Basic experience in various media may include oil, watercolor, acrylic media: a survey of studio methods. LEC/LAB. AP

**ART 122 Watercolor 3 cr** Exploration of aqueous media; aspects of traditional and contemporary procedures. LEC/LAB. AP

**ART 125 Oil Painting 3 cr** Exploration of oil media; aspects of traditional and contemporary procedures. LEC/LAB. Prereq: ART 121 or cons. instr. AP

**ART 131 Introduction to Sculpture 3 cr** Basic experience in three-dimensional media. A survey of materials and procedures used in sculptural processes. LEC/LAB. Prereq: ART 112 recommended. AP

**ART 154 Introduction to Ceramics 3 cr** Exploration of materials and processes; hand and wheel forming; glazing, firing and kiln management. LEC/LAB. Prereq: ART 112 recommended. AP

**ART 183 - Survey: Renaissance - Modern Art 3 cr** Architecture sculpture painting and decorative arts from the late middle ages to the modern era. Field trip. Lecture. FA

**ART 187 Survey: Modern Art 3 cr** Painting, sculpture, printmaking and drawing of the modern era. Field trip. Lecture. FA

**ART 201 Intro Life Drawing 3 cr** Anatomical and compositional considerations related to drawing from the human figure. LEC/LAB AP

**ART 202 Intermediate Life Drawing 3 cr** Advanced study of anatomical and compositional considerations related to drawing from the human figure. LEC/LAB. Prereq: ART 201. AP

**ART 225 Intermediate Oil Painting 3 cr** Continuation of ART 125 with emphasis upon individual development. LEC/LAB. Prereq: ART125. AP

**ART 231 Intermediate Sculpture 3 cr** Second year level course with emphasis upon technical problems related to individual projects. LEC/LAB. Prereq: ART 131. AP

**ART 232 Sculpture II 3 cr** Advanced work in sculptural expression; traditional and contemporary methods of production. LEC/LAB. Prereq: ART 231. AP

**ART 254 Intermediate Ceramics 3 cr** Continuation of ART 154. Further development of craftsmanship with emphasis upon individual projects. LEC/LAB. Prereq: ART 154 recommended. AP

**ART 255 Ceramics II 3 cr** Advanced work in ceramic processes. May include construction and use of molds, slip casting; production technology. LEC/LAB. Prereq: ART 254. AP

**AST 101 Observational Astronomy 1 cr** Observation of solar system, galactic and extra-galactic objects and introduction to basic observational techniques in astronomy. Includes telescopic and unaided eye observation, positional astronomy, astro-photography, optic spectroscopy, interpretation of astronomical data and astronomy laboratory exercises. Students, who have AST 200 or AST 100 for 4 credits or equivalent courses, are not eligible for this course. Prereq: one year of high school algebra and one year of high school geometry or one semester of college algebra. If the prerequisite math course was taken more than five years ago, cons. instr. required. NS; if combined with AST 105 or AST 106, also LS

**AST 105 The Solar System 3 cr** Contemporary understanding of the Solar System; the sky and celestial motions; ancient astronomy; the Copernican revolution; light, gravity, orbits, and astronomical instruments; formation of the solar system; sun, planets and moons, asteroids, comets, meteors and meteorites; and the origins of life. May be offered for three credits without laboratory work, or for four credits with laboratory work consisting of telescopic observation, laboratory demonstration and/or astronomy exercises. Students may not receive credit for both AST 100 and 105. Prereq: high school algebra and geometry or cons. instr. NS; if combined with AST 101, also LS

**AST 106 Stars Galaxies and the Universe 3 cr** Contemporary understanding of the stellar systems; historical development; light, gravity, atoms and nuclei; astronomical instruments; properties and life cycles of the Sun and stars; black holes; the Milky Way and other galaxies; cosmology. May be offered for three credits without laboratory work, or for four credits with laboratory work consisting of telescopic observation, laboratory demonstration and/or astronomy exercises. Students may not receive credit for both AST 100 and 106. Prereq: high school algebra and geometry or cons. instr. NS; if combined with AST 101, also LS

**BAC 101 General Survey of Microbiology 5 cr** Survey of microorganisms and their activities; emphasis on structure, taxonomy, function, ecology, nutrition, physiology, pathology and genetics. Survey of applied microbiology: agricultural, medical, industrial, environmental and food. The laboratory is an introduction to standard techniques and procedures in general microbiology. LEC/LAB, and may also include demonstrations, discussion and field trips. Prereq: introductory CHE, BIO courses recommended. LS/NS

**BIO 103 Human Environmental Biology 4 cr** A contemporary study of the natural world through the human perspective. Emphasis on humans as a modifying force in the biophysical environment, including selected topics in ecological principles, pollution, population biology and environmental management. This course meets the statutory requirement for Conservation of Natural Resources required for State certification for teachers of science and social sciences. LEC/LAB, and may also include demonstrations, discussion and field trips. LS/NS

**BIO 107 Biological Aspects of Conservation of Natural Resources 3 cr** The principles underlying the proper management of our resources water, soils, minerals, forests, wildlife and human. The current and past attitudes relating to the resources with the interaction and complexities of humans' interests. This meets the statutory requirement for Conservation of Natural Resources required for State certification for teachers of science and social sciences. Lecture and may also include demonstrations, discussion and field trips. NS

**BIO 109 Concepts of Biology 5 cr** An introduction to the fundamental principles of living organisms. Includes cell and tissue structure, growth, basic physiological processes, reproduction and inheritance, classification, evolution and ecology. LEC/LAB, and may also include demonstrations, discussion and field trips. LS/NS

**BIO 160 Heredity 3 cr** Principles of heredity with applications to plant, animal and human inheritance; current advances in genetics and their bearing on the life sciences. Lecture and may also include demonstrations, discussion and field trips. NS

**BIO250 - Principles of Ecology 4 cr** The interrelationships between living organisms and their environment ecosystems concepts population dynamics community organization and distribution and application of ecological principles to humans and their environment. LEC/LAB and may also include demonstrations discussion and field trips. Prereq: introductory BIO course. NS/LS

**BIO 260 Genetics 4 cr** Laws of variation and heredity and their modification by environment, genetic engineering and chromosome behavior with emphasis on human genetics. LEC/LAB, and may also include demonstrations, discussion and field trips. Prereq: introductory BIO course. LS/NS

**BOT 130 General Botany 5 cr** An introduction to plant sciences including the structure, development, physiology and genetics of plants. The relation of the major plant groups and the principles of biology. LEC/LAB, and may also include demonstrations, discussion and field trips. LS/NS

**BOT291 Social & Scientific Aspects of Organic Agriculture 3 cr.** Fundamental controversies related to organic agriculture will be explored from both social & scientific perspectives. The historical discussed along with social & scientific challenges to those principles as organic agriculture increases in market share. LEC/LAB. NS/IS

**BUS 101 Introduction to Business 3 cr** Introduction to the role of business in the modern political, social and economic environments; describes career opportunities. EL

**BUS 110 Personal Finance 3 cr** A study of personal financial management. Examines the financial problems and consequent financial decisions required of individuals in our economy. Subjects covered are applications in family budgeting, consumer buying decisions, borrowing, insurance, personal real estate, income taxation, investments and estate planning. AP

**BUS 201 Introductory Accounting 4 cr** Fundamental principles, terminology, techniques and applications; books, accounts and financial statements for retailing and wholesaling concerns; treatment and presentation of proprietorship, partnership and corporate accounts. Prereq: open to second semester freshmen or cons. instr. AP

**BUS 202 Intermediate Accounting 4 cr** Accounting theory principles, concepts and procedures and their applications as applied to balance sheet and income statement accounts, presentation and interpretation of financial statements; problems of terminology, valuation and analysis are included. Prereq: BUS 201. AP

**BUS 204 Managerial Accounting 3 cr** Interpretation and application of accounting reports by management in planning, coordinating and controlling business activities; presentation, analysis and interpretation of financial data; internal control and reports to management; cost-volume profit relationships, budgets, costs and managerial decision making. Prereq: BUS 201. AP

**BUS 210 Business Communication 3 cr** (Same as ENG 210.) Study and practice of the techniques of achieving clarity, brevity and effectiveness in business communication. Planning, preparation, critiquing of business letters, memoranda, short and long reports, résumés, manuals of procedure and oral reports. Prereq: ENG 102. AP

**BUS 220 Introduction to E-Commerce 3 cr** (Same as CPS 120)

This course will familiarize the student with the basics of e-commerce. Major topics include the basics of the internet, entrepreneurship, the creation of a business plan, financing, web site design, and e-business management. Students will develop a background in electronic commerce technology through exploring infrastructure and emerging technical issues in support of e-commerce. AP/IS

**BUS 230 Introduction to Management Information Systems 3 cr** An introductory course designed to provide students with fundamental knowledge of management information systems and their concepts including the use of information systems for management decision-making and the impact of information systems on management. Topics may vary as technology changes but the students will learn the tools of productivity (i.e. Excel) such as electronic spreadsheet, data base, and graphics. Prereq: Second semester freshman or cons. instr. AP

**BUS 297 Special Topics - VITA 3 cr** This course incorporates instruction on current basic tax laws and procedures with a service learning experience to apply current basic tax rules. The service learning component is participation in the Volunteer Income Tax Assistance (VITA) program coordinated by the Internal Revenue Service (IRS) and the Wisconsin Department of Revenue (DOR). Prereq: cons. instr.

**CHE 124 Applied Chemistry and Society 4 cr** A course for non-science majors that covers basic chemistry concepts in a social context. May include explorations of how chemistry impacts the environment, public health, energy policies, and other contemporary social issues. LEC/LAB may also include discussions and demonstrations. Not a suitable prerequisite for higher-level chemistry courses or pre-professional programs. (A student may not earn more than four credits by taking CHE 123 and CHE 124. LS/NS

**CHE 125 General Chemistry II 5 cr** A one semester introductory course in college chemistry including an introduction to organic chemistry. LEC/LAB/DIS. Primarily for students whose programs require only CHE 125 or CHE 125-203 combination. Students may not count both CHE 125 and CHE 145 toward the natural science or laboratory science requirement for the associate degree. Recommended: demonstrated competency at MAT 105 level or concurrent MAT 105 registration. LS/NS

**CHE 145 General Chemistry I 5 cr** The first semester of a one-year course in college chemistry. LEC/LAB/DIS. For students whose programs require a year of college chemistry or who plan to take advanced courses in chemistry. Students may not count both CHE 125 and CHE 145 toward the natural science or laboratory science requirement for the associate degree. Prereq: demonstrated competency at MAT 110 level or concurrent MAT 110 registration. LS/NS

**CHE 155 General Chemistry II 5 cr** The second semester of a one-year course in college chemistry. LEC/LAB/DIS. For students whose programs require a year of college chemistry or who plan to take further courses in chemistry. Prereq: A grade of C- or better in CHE 145 and demonstrated competency at the MAT 110 level or cons. instr. LS/NS

**CHE 165 Chemistry for Engineers 5 cr** A one-semester chemistry course for engineering students. Topics include measurements, atomic theory, stoichiometry, molecular structure, thermochemistry, electrochemistry, solid state, material science, and organic chemistry. Prereq: Grade of C- or better in CHE 112 or CHE 125 or grade of B or higher in high school chemistry, and grade of C or better in MAT 110 or 124 or placement into MAT 221 based on placement test score, or cons. instr.. Not a suitable substitute for the CHE 145/155 prerequisite

for organic chemistry. LS/NS

**CHE 204 Applied Survey of Biochemistry 4 cr** An elementary course in the chemical makeup and metabolic processes of living organisms. For non-science majors. Average of three hours of lecture and three hours of laboratory per week. Together CHE 125 and CHE 204 constitute a year course with emphasis on organic and biological chemistry for non-science majors. This course is highly recommended for degree nursing students. (CHE 204 is equivalent to the combination of CHE 203 and CHE 211. A student may not earn more than four credits by taking CHE 204 and CHE 203/211.) This course is pending UWC approval. LS/NS

**CHE 299 Independent Study 1 cr** Prereq: cons. instr. \*

**CHE 343 Organic Chemistry I 3 cr** The first semester of a year course in organic chemistry. Three hours of lecture per week. Prereq: A grade of C- or better in CHE 155 or cons. instr. If combined with CHE 351 or CHE 352, also LS

**CHE 351 Organic Chemistry Laboratory Part I 1 cr** Three to four hours of laboratory per week. Prereq: CHE 343 or concurrent registration or cons. instr. LS/NS

**CHE 361 Organic Chemistry Laboratory Part II 1 cr** Three to four hours of laboratory per week. Prereq: A grade of C- or better in CHE 351 or cons. instr. LS/NS

**CHE 363 Organic Chemistry II 3 cr** Continuation of Organic Chemistry I. Three hours of lecture per week. Prereq: A grade of C- or better in CHE 343 or cons instr. NS

**CHI 101 First semester Chinese 4 cr** Elementary modern Mandarin for students with no previous experience in the language. Emphasis on listening and speaking, with some reading and writing. Focus on Chinese culture throughout the course. AP

**CHI 105 Second Semester Chinese 4 cr** Continuation of CHI 101, elementary modern Mandarin. Prereq: CHI 101, AP

**COM 101 Interpersonal Communication 3 cr** A course aimed at introducing communication theory, increasing the student's awareness of communication with others in one-on-one situations, and improving personal communication skills. Topics studied include perception, listening, nonverbal communication, language, and conflict management. AP

**COM 103 Introduction to Public Speaking 3 cr** Study of the principles and techniques of effective speaking and listening in a variety of selected communication experiences. AP

**COM 104 Applied Journalism-Newspaper 1 cr** Practical application of the principles of writing, editing, photography and production of materials for campus publications. It is possible to register in more than one section with cons. instr. AP  
LEC 01: News Writing 1 cr.  
LEC 02: Photo-Journalism 1 cr.  
LEC 03: Desktop Publishing 1 cr.

**COM 105 Applied Journalism-Radio 1 cr** Practical application of the principles of writing, editing and producing materials and/or presenting materials on the radio. AP

**COM 106 Applied Journalism-Television 1 cr** Practical application of the principles of writing, editing, videotaping and producing materials for and/or presenting materials on television. AP

**COM 130 Introduction to Theatre 3 cr** A study of the development of theatre as an art form. Emphasis is on the role of the audience and the understanding and appreciation of the nature of theatre, important plays, dramatic styles and elements of a theatrical production. FA

**COM 131 Theatre Laboratory 1 cr**

Participation in theatrical production activities including directing, stage management, technical production, lighting, stage design, costuming, make-up, acting and theatre management. It is possible to register in more than one section with cons. instr. AP

LEC 01: Acting 1 cr.

LEC 02: Technical production 1 cr.

LEC 03: Theatre management 1 cr.

**COM 150 Introduction to Film 3 cr** Study of the nature and development of film as a distinctive medium of communication and as an art form. FA

**COM 201 Introduction to Mass Communication 3 cr** A survey course examining print, electronic and persuasive media from an historical perspective. Topics discussed include newspapers, magazines, books, radio, television, film, public relations and advertising. SS

**COM 221 Introduction to Television Broadcasting 3 cr** The study of the principles and practices of contemporary television production and programming, including laboratory work. AP

**COM 232 Introduction to Acting 3 cr** Exploration of the fundamentals of acting through exercises and improvisations designed to enhance presentation of self and to promote concentration, observation, imagination and sensory responsiveness. AP

**COM 298 Topics Speech and Dramatic Arts "Broadcast Management and Organization" 3 cr** For students who have shown promise in 105 or 106 practical TV or radio courses. In the TV version of COM 298 students will be responsible for scripting, producing, and organizing a continuing show for broadcast on local cable. Shows currently in production are the local music video/performance based show Fox Traxx and the movie review show A Theater Near You. In the Radio version of the course the COM 298 student will be responsible for basic technical training of students making their own radio shows, (studio and computer) as well as responding to technical queries and evaluating the 105 shows on a regular basis. HU

**CPS 103 Computer Fundamentals I 1 cr** An overview of computers, what they are and how they work. Typical topics include history, hardware, programming languages and operating systems, application software, communications, career opportunities and ethical issues. Also included is an introduction to the campus computing network. Students may not receive credit for both CPS 103 and CPS 110. EL

**CPS 105 Computer Applications 3 cr** Principles and use of computer applications including word processors, spreadsheets and data bases. May also cover other applications such as telecommunications, graphics, statistics, simulations or CAI. Does not include teaching of programming. Course may not be taken more than once for degree credit. Students may not receive credit for both CPS 105 and any of CPS 106, CPS 107, CPS 108. AP

**CPS 106 Word Processing and Presentation Concepts (MS Word & PowerPoint) 1 cr** Text entry, editing, manipulation and presentation. Covers typical as well as many advanced features of word processing and presentation software. This course involves extensive hands-on experience. Students may not receive credit for both CPS 106 and CPS 105. AP

**CPS 107 Spreadsheet Concepts (MS Excel) 1 cr** Typical features and application of electronic spreadsheets. This course involves extensive hands-on experience. Students may not receive credit for both CPS 107 and CPS 105. AP

**CPS 108 Database Concepts (MS Access) 1 cr** Creation of data files and data manipulation (editing, sorting, deleting, etc.). Report definition and generation. Accessing and searching of remote data bases. Includes extensive hands-on experience. Students may not receive credit for both CPS 108 and CPS 105. AP

**CPS 110 Introduction to Computer Science (Visual Basic) 3 cr** How computers work, communicating with computers, areas of application and significance, simple Algebraic Language programming, elementary data processing and problem solving. Instruction and significant experience in BASIC. Prereq: Competency at the MAT 105 level. Students may not receive credit for both CPS 110 and either of CPS 103 or CPS 130. EL

**CPS 120 Introduction to E-Commerce 3 cr** (Same as BUS 220)

This course will familiarize the student with the basics of e-commerce. Major topics include the basics of the internet, entrepreneurship, the creation of a business plan, financing, web site design, and e-business management. Students will develop a background in electronic commerce technology through exploring infrastructure and emerging technical issues in support of e-commerce. AP/IS

**CPS 130 Introduction to Programming (Visual Basic) 2 cr** The basics of programming in BASIC for beginners. Introductory information on editing, program structure, data types, input, output, calculating, looping and selection. Short programs will be written and tested on a computer. Prereq: Competency at the MAT 105 level. Students may not receive credit for both CPS 130 and CPS 110. EL

**CPS 139 Web Page Development 2 cr** Development of web pages using HTML and Cascading Style Sheets. Introduction to XML documents and XHTML standards. This course involves extensive hands-on experience. AP

**CPS216 - Problem Solving and Programming Techniques in C++ 4 cr** Program design using both modular and object-oriented methods. Topics covered to include stream I/O recursion multi-dimensional arrays sorting and searching pointers and dynamic memory allocation classes and abstract data types and operator overloading. Prereq: advanced high school mathematics or equivalent or previous programming experience or consent of instructor. MS

**CPS 240 Advanced Visual Basic 3 cr** Covers the user interface of Visual Basic and presents common programming structures. Advanced topics include object-oriented programming and accessing databases using Visual Basic. Prereq: MAT 105, and previous programming experience (not necessarily in Visual Basic), or cons. instr. MS

**CPS 245 Computer Science I: Object-Oriented Programming (Java) 4 cr** Introduces the fundamental concepts of programming from an object-oriented perspective. Topics include simple data types, control structures, an introduction to array and string data structures and algorithms, text and binary files, as well as the social implications of computing. The course emphasizes developing fundamental programming skills in the context of a language that supports the object-oriented paradigm. Prereq: MAT 110 or concurrent registration or cons instr. MS

**CPS 255 Computer Science II: Objects and Data Abstraction 3 cr** Continues the introduction from CPS 245 to the methodology of

programming from an object-oriented perspective. Through the study of object design, this course also introduces the basics of human-computer interfaces, graphics, and the implementation of fundamental data structures including lists, stacks, and queues. The course includes a significant software development project, with an emphasis on software engineering principles and debugging techniques. Prereq: CPS 245 and MAT 110. AP

**CPS 260 Programming in Assembly Language 3 cr** An introduction to microcomputer assembly language programming and architecture for students with previous exposure to a high level language. Topics typically include machine instruction sets, interrupts, Boolean logic, binary coding of numeric and alphanumeric data, arrays and input/output. Optional topics may include file access, macros, graphics and mixed language programming. Prereq: 2 credits of programming in a high level language or cons. instr. MS

**CPS 265 Computer Science III: Algorithms and Data Structures 3 cr** Builds on the introduction to object-oriented programming begun in CPS 245 and CPS 255, but using a different language than that used in those courses. Data structure surveyed include hash tables, binary search trees, and graphs, as well as linked implementations of lists, stacks, and queues. Through iterative and recursive implementation of the fundamental algorithms on those data structures, the course introduces algorithm analysis and computational complexity. Prereq: CPS 255 and MAT 211, 221 or 230, or cons. instr. MS

**ECO 101 Intro to Economics 3 cr** A study of economic systems and their interdependence in the global economy, with emphasis on problems and policies. Among the subjects included are competitive and non-competitive markets, gross domestic product determination and policy, the U.S. financial system and global trade. SS

**ECO 203 Economics Macro 3 cr** The emphasis of the course is on macro analysis and covers areas such as national income, commercial banking, business fluctuations, monetary and fiscal policies and economic growth. Designed for students who desire a basic one-year course (with ECO 204) in economics. Prereq: MAT 105, ENG 101. SS

**ECO 204 Economics – Micro 3 cr** Emphasizes the micro economic approach concerning households, firms and market structures with a focus on price determination and distribution of income. Foreign trade and international financial institutions are included. Prereq: MAT 105 and ENG 101 or cons. instr. recommended. SS

**ECO 243 Economic and Business Statistics 3 cr** (Same as BUS 243) Elementary theory and techniques, probability and normal distribution, hypothesis testing, analysis and interpretation of economic and business data, index numbers, regression and time series analysis and Chi squares. Prereq: MAT 110 or MAT 210 or MAT 211 or concurrent registration in MAT 211. MS

**EDU 201 Concepts Issues and Field Experience in Education 3 cr** Classroom discussion (two hours per week) of educational principles, concepts and issues related to student-teacher-school-community interactions, including developmental aspects, sociocultural influences and human relations. Off-campus experience involving active participation in the program at an educational institution (four hours per week of off-campus experience will usually be required, but number may vary with current DPI and 4-year campus requirements.) AP

**EDU 230 Educational Psychology 3 cr** A study of the developmental process in children in the context of psychological principles of teaching and learning. Emphasis will be placed on understanding the social, emotional, physical, and intellectual development of children and adolescents. Attention will be directed

toward the nature and conditions of learning, including the major types of learning, critical aspects of learning and the problems encountered in fostering and directing learning. Prereq: PSY 201 or PSY 202 or EDU 201 (grade of C- or better), or cons. instr. SS

**EDU 300 The Exceptional Individual 3 cr** The definition, classification and etiology of conditions creating special education needs. Topics include intellectually retarded, gifted, emotionally disturbed, and the speech, auditorily, visually, orthopedically and neurologically impaired. Prereq: PSY 201 or PSY 202 (grade of C- or better or cons. instr.); PSY 360 recommended. SS

**EGR 105 Engineering Fundamentals 3 cr** This course is designed to equip engineering students with the necessary tools and background information to prepare them to be successful engineering students as well as a successful practicing engineer. Topics covered in this course include project management, team work, technical writing, working with data and using spreadsheets, creating presentations, engineering design, and a thorough understanding of the engineering profession. Students may not receive credit for both EGR 100 and EGR 105. AP/IS

**EGR263 - Engineering Thermodynamics 3 cr** First and second laws of thermodynamics; thermodynamic properties of real and ideal gases vapors and mixtures; analysis of power and refrigeration cycles. Prereq: MAT 223 PHY 201 or MEC 202 or cons. instr. NS

**EGR 282 Engineering Economics 3 cr** Economic and financial factors in the engineering environment to be considered in managerial decision making. Emphasizes the time value of money, present worth analysis, uniform series, rate of return, benefit cost ratios, depreciation, income taxes, inflation. Prereq: MAT 110. EL

**ENG 098 Basic of Composition 3 cr** A study of fundamental writing skills, including grammatical conventions, usage, sentence structure, paragraph development and the organization of short essays. Recommended: First Semester Enrollment.

**ENG 099 Basic Writing Tutorial 1 cr (Intended for students enrolled in ENG 098)** Intended primarily for students concurrently enrolled in Basics of Composition or Composition I this tutorial will provide individualized instruction to help students develop the fundamental writing skills and basic techniques of composition required for success in those courses and in higher-level composition courses. Non-degree credit.

**ENG 101 Composition I 3 cr** A writing course that focuses on the basic techniques of composition, on the composing process with attention to drafts and revisions, and on coherence and organization of student essays. Prereq: a grade of C or better in Basics of Composition or exemption based on placement test score.

**ENG 102 Composition II 3 cr** A rhetoric course that focuses on writing which presents information, ideas, and arguments, with attention to the essay and techniques of documentation. Emphasis will be on academic writing which is applicable across the curriculum. Prereq: C or better in ENG 101 or exemption based on placement test score.

**ENG 201 - Intermediate Composition 3 cr** A course devoted to the theory and practice of writing prose on a more advanced level than ENG 102.: prose that is intended to inform present ideas and/or persuade. Emphasis will be placed on coherent organization clear and forceful phrasing logical thinking and other aspects of effective communication. Prereq: ENG 102 or exemption based on placement test score or cons. instr. AP

**ENG 203 Creative Writing I 3 cr** Chiefly devoted to writing and studying one or more of the following: fiction, poetry and drama. Prereq: ENG 102 or cons. instr. AP

**ENG 204 Creative Writing II 3 cr** Chiefly devoted to writing and studying one or more of the following: fiction, poetry and drama. A continuation of ENG 203. Prereq: ENG 102 or cons. instr. AP

**ENG 205 Literary Magazines 3 cr** A study of contemporary literary magazines, including national and student publications produced in print and online, resulting in students collaborating to produce their own literary publication(s). Prereq: ENG 102 or cons. instr. AP, EL

**ENG 250 Introduction to Literature 3 cr** Intensive analysis of literature, including poetry, drama and fiction, using representative types from several periods of literature. Not open to students with credit in ENG 251, ENG 253 or ENG 255. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or cons. instr. HU

**ENG 260 English Literature Before 1798 3 cr** A study of the development of British literature before 1798 through a survey of significant poetry, drama, fiction, and/or nonfiction. Not open to students with credit in ENG 270. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or cons. instr. HU

**ENG 261 English Literature After 1798 3 cr** A study of the development of British literature after 1798 through a survey of significant poetry, drama, fiction, and/or nonfiction. Not open to students with credit in ENG 270. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or cons. instr. HU

**ENG 262 American Literature Before 1865 3 cr** A study of the development of American literature before 1865 through a survey of significant poetry, drama, fiction, and/or nonfiction. Not open to students with credit in ENG 272. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or cons. instr. HU

**ENG 263 American Literature After 1865 3 cr** A study of the development of American literature after 1865 through a survey of significant poetry, drama, fiction, and/or nonfiction. Not open to students with credit in ENG 272. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or cons. instr. HU

**ENG275 - Twentieth Century Novels of the World 3 cr** A study of the twentieth century novel in a number of countries (usually excluding American and European novels). The course will explore the cultures of those countries as they are reflected in the novels. Prereq: Exemption from 101 based on placement test score or ENG 101 or cons. instr. HU

**ENG 278 Multicultural Literature in America 3 cr** A study of ethnic literatures in America, chiefly African American, Asian American, Native American, and/or Latino, though not necessarily limited to these groups. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or cons. instr. May be taken for credit more than once if content changes. ES/HU

**ENG 280 Introduction to Shakespeare 3 cr** A study of selected plays and sonnets. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or cons. instr. HU

**ENG 286 The Literature of Sports 3 cr** A study of texts (e.g. fiction nonfiction poetry drama film) that use sports in significant thematic or symbolic ways primarily by Americans in the 20th century. Prereq: Exemption from ENG 101 based on placement test score or ENG 101 or consent of instructor. HU

**ENG 290 Special Topics – Science Fiction in Literature and Film 3 cr** A study of the historical, thematic, and theoretical development from the late nineteenth century to today of science fiction in literature and film. HU

**FRE 101 First Semester French 4 cr** For students who have had no previous training in the language. Emphasis on reading, writing, listening and speaking in French. Classes also may include cultural studies of France and other French-speaking countries. Field trip may be required. AP

**FRE 105 Second Semester French 4 cr** Continuation of FRE 101 or FRE 104. Field trip may be required. Prereq: FRE 101 or FRE 104 or cons. instr. AP

**FRE 201 Third Semester French 4 cr** Reviews grammar taught during first two semesters while adding new material with some stress on idiomatic usage. All four skills (reading, writing, listening and speaking) are practiced, and continued emphasis is placed on acquisition of cultural knowledge. Field trip may be required. Prereq: FRE 105 or FRE 107 or cons. instr. HU

**FRE 205 Fourth Semester French 4 cr** Continuation of FRE 201 or FRE 204. Reading, writing, audio oral practice, cultural insights based on literary texts in French. Field trip may be required. Prereq: FRE 201 or FRE 204 or cons. instr. HU

**FRE 277 Special Topics in Literature and/or Culture and Civilization – Introduction to French Theatre (Fall 2008); France and the Middle Ages (Spring 2009) 3 cr** Class discussions and written work in English. No knowledge of French necessary. No foreign language credit HU

**GEO 101 Introduction to Cultural Geography 3 cr** A survey of world patterns of culture, such as population, language, religion, urban and rural settlement, and their causal relationships, emphasizing the global diversity of world cultures, contrasting world views and the issues thus raised. SS

**GEO 106 Introduction to Geographic Information Sciences (GIS) 4 cr** An introduction to methods for organizing and interpreting spatial information using state-of-the-art techniques and tools of geographic information sciences. These include remote sensing, computer cartography, global positioning systems (GPS) and spatial analysis. Hands-on experiences provide a foundation for higher level courses and applications across the disciplines, e.g. anthropology, sociology, planning, history, as well as geography, geology, and climatology.

**GEO 110 World Regional Geography 3 cr** Introduction to cultural geography through the integrated study of representative and significant world regions. Examples will compare and contrast present and potential ethnic, social, political, and environmental problems across select regions of the world, and explore basic solutions. SS

**GEO 123 Physical Geography: Weather and Climate 5 cr** Study of Earth's atmospheric elements in both the short term (weather events) and long term (climate and climate change). Subjects include temperature, the seasons, pressure, wind and wind systems, humidity, cloud cover, stability and precipitation, jet streams, cyclones and fronts, tornadoes and hurricanes. Study of the world's different climate regions, soils and vegetation; climate change (Greenhouse Effect, Ice Ages); and human interaction with weather and climate. Two or four hours of lab per week depending on the credit. Field trip/s may be required. May not be taken for credit by students who have had GEO 120 or 125. LS/NS

**GEO 124 Physical Geography: Landforms 5 cr** Study of the evolution and distribution of Earth's surface features (landforms) and physical landscapes along with the processes shaping them. Subjects include plate tectonics, volcanoes, faults, rivers and river flow, glaciers, beaches, dunes, landslides, etc. Two or four hours of lab per week depending on the credit. Field trip(s) may be required. May not be taken for credit by students who have had GEO 120 or GEO 125. LS/NS

**GER 101 First Semester German 4 cr** For students who have had no previous training in the language. Emphasis on reading writing listening and speaking in German. Classes also may include cultural studies of Germany and other German-speaking countries. Field trip may be required. HU

**GER105 - Second Semester German 4 cr** Continuation of GER 101 or GER 104. Field trip may be required. Prereq: GER 101 or GER 104 or consent instructor. HU

**GLG 101 Physical Geology 4 cr** Study of the physical nature of Earth; the processes in operation above, on and beneath the surface that continue to shape its physical evolution (e.g. vulcanism, plate tectonics, faulting and earthquakes, glaciation, rivers); the origin and nature of common minerals and rocks and their distribution in the world; landscapes and their origins (e.g. mountain ranges, glacial forms, river valleys, etc.). Lab work includes the study of rocks and minerals, the interpretation of geologic and topographic maps and aerial photographs, along with data, map and chart analysis. Two or four hours of lab per week depending on the credit. Field trip(s) may be required. LS/NS

**GLG 169 Environmental Geology 4 cr** The physical environment and our interaction with it. Emphasis on Earth processes affecting humans, such as flooding, erosion, groundwater, landslides, and earthquakes. The impact of humans upon the environment along with the application of the science of geology to these impacts. Air, water, and soil pollution studied from a physical-chemical standpoint. The depletion of energy and mineral resources and the need for humans to design with nature. Two or four hours of lab per week depending on the credit. Field trip(s) may be required. LS/NS

**GLG 170 - Disasters-Living on the Edge 3 cr** (Same as GEO 170). Study of various environmental hazards their causes impacts on humans and mitigations. Core topics are natural hazards (earthquakes volcanoes flooding landslides tornadoes hurricanes) and anthropogenic hazards (climate change/global warming nuclear hazards and overpopulation). Additional topics may be covered: coastal hazards pollution of groundwater air soil and water other atmospheric hazards (extreme weather droughts) impacts from space extinctions biohazards chemical hazards and terrorism. May not be taken for credit by students who have had GLG 169 GLG 135. NS; if 4 cr also LS and will include lab work

**GRA 110 Engineering Graphics with Computer Aided Drafting 3 cr**  
An introductory course in engineering graphics focusing on graphical communication. Topics include descriptive geometry elements, visualization, engineering drawing techniques, orthographic projection, pictorial representation, auxiliary views, section views, and basic dimensioning. The course incorporates computer aided drafting (CAD) with engineering applications using 2-D drawing and 3-D modeling techniques. AP

**HIS 101 History of the US: From the Era of the Columbian Exchange to the Era of the Civil War 3 cr** A survey of American political, economic, social, and intellectual history from the Age of European Exploration and the period of colonization to the era of the Civil War. Special attention will be given to issues of cultural diversity and the historical problems faced by racial, ethnic, and religious

minorities. ES/SS

**HIS 102 History of the United States: From the Era of the Civil War to the Present 3 cr** A survey of American political, economic, social, and intellectual history from the era of the Civil War to the present. Special attention will be given to issues of cultural diversity and the historical problems faced by racial, ethnic, and religious minorities. ES/SS

**HIS 105 History of Western Civilization 3 cr** Survey of Western Civilization from ancient times through the Renaissance, emphasizing the distinctive features of Western culture, political development, economic development and the contributions made by non-Western people. HU

**HIS 106 History of Western Civilization 3 cr** Survey of Western Civilization from the Renaissance to contemporary times, emphasizing the further development of Western culture, political institutions and economic institutions, including reference to the interaction among the peoples of the modern world. HU

**HIS 127 The World in the Twentieth Century 3 cr** Survey of the major trends in Europe, Asia, Africa and the Americas since 1900; the two world wars; the social and political revolutions of our time; Fascism and Communism; and the new states of Africa and Asia. SS

**HIS 161 World History to 1500 3 cr** A topical approach to the history of premodern humankind. Special attention will be given to the emergence, development and interaction of civilizations in Asia, Africa, Europe and the Americas. HU

**HIS162 - World Hist Since 1500 3 cr** A topical history of global humankind with emphasis on the rise of the West to world dominance and the various ways in which the peoples of Africa Asia and Latin America have responded to the Western challenge. HU

**HIS 271 History of Science and Technology 3 cr** This course surveys American and/or Western scientific thought from its origins to the present. It also focuses on how scientific thought becomes translated to everyday life through technology. It also examines how science and technology affects government, economics, and culture. Emphases on American and/or Western science and technology. SS/IS

**HIS 278 History of Minorities in America 3 cr** This course will explore the role of ethnic, racial, religious and sexual groups in the history of the United States from the era of colonization to the present. Includes political, economic, social and cultural development. ES/SS

**HIS285 - Recent American History 1917-1945 3 cr** Political social economic and cultural changes in America during World War I the Twenties the Great Depression and World War II. Prereq: Successful completion of a 100-level UW Colleges history course with a C or better or cons. instr. SS.

**HIS 293 Civil War and Reconstruction 3 cr** Analysis of slavery in the Old South, the anti-slavery movement, the conflict between the North and South (sectionalism), the significance of the Civil War, presidential and congressional reconstruction, the position of the freedmen in the South and postwar America. Prereq: Successful completion of a 100-level UW Colleges history course with a C or better, or cons. instr. SS

**INT 290 Special Topics- Reading and Writing About Feminist Philosophy 1 cr** This Learning Community is designed to introduce students to the development of feminism as a philosophical movement and to acquaint them with contemporary feminist issues and thought

(please see the accompanying syllabus for Philosophy 202 for a more detailed description of Philosophy 202 objectives). Additionally, the Learning Community will provide students with the opportunity to explore Feminist Philosophy and Composition II course concepts with greater depth and breadth than a traditional three-credit course format generally affords by providing practical application for research strategies and approaches, a contextual application of research in writing, and extended research and discussion of philosophical concepts. Students will conduct a research project in Feminist Philosophy, and report those findings following the conventions of their discourse community in both written and oral formats. Finally, students will hone their library research and critical thinking skills as they are asked to identify and explore a specific feminist philosophy concept by researching the concept's origins, historical and contemporary development, support and opposition, and real-life ramifications. HU/IS and Women's Studies

**INT 290-01 Special Topics-Reading and Writing About Feminist Philosophy 1 cr** This Learning Community is designed to introduce students to the development of feminism as a philosophical movement and to acquaint them with contemporary feminist issues and thought. Additionally, the Learning Community will provide students with the opportunity to explore Feminist Philosophy and Composition II course concepts with greater depth and breadth than a traditional three-credit course format generally affords by providing practical application for research strategies and approaches, a contextual application of research in writing, and extended research and discussion of philosophical concepts. Students will conduct a research project in Feminist Philosophy, and report those findings following the conventions of their discourse community in both written and oral formats. Finally, students will hone their library research and critical thinking skills as they are asked to identify and explore a specific feminist philosophy concept by researching the concept's origins, historical and contemporary development, support and opposition, and real-life ramifications. HU/IS and Women's Studies

**INT 290-02 Special Topics-AIDS in Society 3 cr** A multi-disciplinary approach to the investigation of how one disease has influenced the lives of many people. Topics to be discussed include the biology of AIDS, and changing standards of sexuality and sexual behavior which has influenced the incidence of AIDS, socioeconomic and demographic patterns influencing the incidence of AIDS, the treatment of AIDS in literature, theatre, art, and political factors which influence AIDS and its treatment. This course will also examine the impact of HIV/AIDS in African American and Hispanic ethnic populations. SS/ES/IS

**INT 290-03 Special Topics-Balancing the Scales between Fitness and Nutrition for a Healthy Life 1 cr** This Learning Community is designed to allow students to integrate knowledge learned regarding fitness and nutrition, learning how the two concepts are vital to maintain a healthy lifestyle. Concepts of fitness and nutrition will be examined in greater detail than what is allowed in PED 127 and PED 209. Students will apply what they learn to their own lifestyle, as well as using the knowledge to teach others. The main project of the course will have the students engaged in service learning through the organization and implementation of a Fitness/Nutrition fair for a local middle school. Students in the learning community will be responsible for all information presented to the middle school students. AP/NS/IS

**ITA 103 First Semester Italian – Part I 2 cr AP**

**ITA 104 First Semester Italian – Part II 2 cr AP**

**LEA 102 Learning Skills 2 cr** This course is designed for the student who needs to develop generalized learning skills. Areas of study may

include managing time, taking notes, reading and studying textbooks, reading comprehension, developing vocabulary, organizing the research paper and making oral presentations.

**LEA 104 Career Planning and Preparation 1 cr** This course will enable students to develop career goals and lay out a path for achieving these goals. Students will examine their personal interests, aptitudes, values, decision making skills, academic plans and career awareness. This personal, educational and occupational information will then be organized and translated into an individualized course of action. Integration of career goals with current and future college course work will be stressed.

**LEC 100 First-Year Seminars 1 cr** Help students make the transition to college by promoting active learning as well as student involvement and responsibility in the learning process, assisting students in the development of life management skills, and engaging students on campus. Each LEC 100 section incorporates a specific subject of inquiry. Consult the campus course schedule for additional information. Optional for all first year students who have placed in ENG 101 or higher, and have not been required to take LEA102. EL

**LEC 100 Science, Belief & Utter Nonsense 1 cr** This Learning Community is designed to allow students to integrate knowledge learned regarding fitness and nutrition, learning how the two concepts are vital to maintain a healthy lifestyle. Concepts of fitness and nutrition will be examined in greater detail than what is allowed in PED 127 and PED 209. Students will apply what they learn to their own lifestyle, as well as using the knowledge to teach others. The main project of the course will have the students engaged in service learning through the organization and implementation of a Fitness/Nutrition fair for a local middle school. Students in the learning community will be responsible for all information presented to the middle school students. EL/IS



## Learning Communities

Understanding the "real world" requires integrating knowledge from different points of view. Learning Communities link two or more courses and foster integrated understanding and competencies. Students in Learning Communities get to know their professors and other students even better than they would by taking the courses alone. Learning Communities provide multiple credits and fulfill several degree designations for the Associate of Arts & Science degree.

Fall 2009

### LEC 100 First-Year Retreat: Fox in the Woods (EL/IS credits)

LEC 100-01 MF 12-12:50PM 3 credits, or  
LEC 100-02 MF 12-12:50PM 3 credits, or  
LEC 100-03 MF 12-12:50PM 3 credits

How are issues of sustainability and the environment viewed by students, academics and professionals from different walks of life? We will kick off this semester-long course with a weekend retreat to the woods of northern Wisconsin where we will learn about sustainability, the environment and the role of students and scholars in research and inquiry. Weekly discussions will deepen our understanding and skills. This pilot project Learning Community is recommended for students who are interested in environmental issues or wish to major in science or business related fields.

Spring 2010

### Reading and Writing About Feminist Philosophy (HU/IS and Women's Studies credits)

ENG 102-09 TTh 10:50-12:05PM 3 credits, and  
PHI 202-01 MW 1:30-2:45PM 3 credits, and  
INT 290-01 W 2:45-3:35PM 1 credit

### AIDS in Society (SS/ES/IS credits)

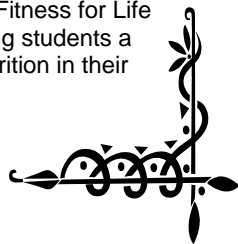
INT 290-02 TTh 2:25-3:40PM 3 credits

This is a 3 credit Learning community which provides a multi-disciplinary approach to the investigation of how one disease has influenced the lives of many people.

### Balancing the Scales between Fitness and Nutrition for a Healthy Life (AP/EL/IS credits)

PED 127-03 MWF 11:00-11:50AM 2 credits, and  
PED 209-01 TTh 9:25-10:40AM 3 credits, and  
INT 290-03 F 12:00PM – 12:50PM 1 credit

This Learning Community will bring together the Fitness for Life and Nutrition and Weight Control courses, giving students a chance to learn how to balance fitness and nutrition in their daily life.



**LEC 102 Library and Research Seminar 1 cr** This course will explore research processes using print and electronic formats. It includes the identification and analysis of searches and sources, the proper organization and integration of information gathered, and the consideration of intellectual property issues. No prerequisites. EL

*Mathematics:* The successful completion of the equivalent of one course in geometry is a prerequisite for all credit mathematics courses.

**MAT 081 Topics in Geometry 3 cr** Designed for students who have not had high school geometry. Includes methods of proof, properties of simple plane figures, congruence and similarity. Course does not carry degree credit. Prereq: Instructor recommends the completion of MAT 090 or a placement into MAT 091 or higher.

**MAT 090 Basic Mathematics 3 cr** Designed for students with minimum algebra background or who have been away from mathematics for several years. Subject areas to be covered include arithmetic of whole numbers, fraction and decimals, ratios and percents, and basic algebraic concepts. Prepares the student for MAT 091.

**MAT 091 Elementary Algebra 4 cr** Intended for students with little or no previous algebra. Topics include the real number system and operations with real numbers and algebraic expressions, linear equations and inequalities, polynomials, factoring and introduction to quadratic equations. Course does not carry degree credit.

**MAT 105 Introduction to College Algebra 3 cr** Emphasizes algebraic techniques with polynomials, fractional expressions, exponents and radicals, linear and quadratic equations, and inequalities. Introduction to functions, their graphs and analytic geometry. Prereq: C or better in Elementary Algebra or placement based on placement test score. Instructor recommends the successful completion of the equivalent of one course in geometry for all credit mathematics courses.

**MAT 108 Quantitative Reasoning 3 cr** This course is intended to develop analytic reasoning and the ability to solve quantitative problems. Topics to be covered include construction and interpretation of graphs, functional relationships, descriptive statistics, geometry and spatial visualization, math of finance, exponential growth, and basic probability. Appropriate use of units and dimensions, estimates, mathematical notation and available technology will be emphasized throughout the course. Prereq: a) two years of high school algebra, b) C or better in MAT 105, or c) course(s) equivalent to a) or b). MS

**MAT 110 College Algebra 3 cr** Definition of function; linear and non-linear functions and graphs including logarithmic and exponential functions; systems of linear equations; theory of polynomial equations and optional topics such as mathematical induction, matrix solution of linear systems and Cramer's rule. Prereq: A grade of C or better in MAT 105 or placement based on placement test score. Instructor recommends the successful completion of the equivalent of one course in geometry for all credit mathematics courses. MS

**MAT 113 Trigonometry 2 cr** Trigonometric functions, their basic properties and graphs, identities, inverse trigonometric functions, solving trigonometric equations, solutions of triangles. Prereq: a) a grade of C or better in MAT 110 or b) concurrent registration in MAT 110 or c) placement based on placement test score. Instructor recommends the successful completion of the equivalent of one course in geometry for all credit mathematics courses. MS

**MAT 117 Elementary Statistics 3 cr** The primary aim of the course is a basic understanding and use of statistical concepts and methods to facilitate study and research in other disciplines. Includes measures of central tendency, measures of variability, grouped data, the normal

distribution, central limit theorem, hypothesis testing, estimation, T-distribution and chi square test. Prereq: a grade of C or better in MAT 105 or MAT 108 or equivalent. MS

**MAT 124 Pre-Calculus Mathematics 5 cr** Functions and graphs, including linear, polynomial, logarithmic and exponential functions; complex numbers and theory of equations; binomial theorem; mathematical induction; trigonometric functions, their basic properties and graphs; identities; inverse trigonometric functions; solving trigonometric equations; de Moivre's theorem. Prereq: a grade of C or better in MAT 105 or placement based on placement test score. Students may not earn more than five credits of any combination of MAT 110, MAT 113 and MAT 124. MS

**MAT 130 Mathematics for Elementary Teachers 4 cr** A math content course for prospective elementary teachers. Emphasis is on development of properties of arithmetic. Topics also may include elementary concepts of algebra, probability and statistics. Four hours lecture or 3 hours lecture and 2 hours laboratory per week. Prereq: C or better in MAT 105 or MAT 108, or two years of high school algebra and one year of high school geometry, or cons. instr. MS

**MAT 132 Geometry for Elementary Teachers 4 cr** The course emphasizes geometric concepts. Topics also may include concepts of algebra, probability and statistics. Four hours lecture or three hours lecture and two hours laboratory per week. Prereq: a grade of C or better in MAT 105 or MAT 108, or two years of high school algebra and one year of high school geometry, or cons. instr. MS

**MAT 210 Topics in Finite Mathematics 4 cr** Matrices, linear programming and applications, probability, Markov chains and mathematics of finance. Prereq: C or better in MAT 110 or MAT 124 or equivalent, or placement based on placement test score. MS

**MAT 211 Calculus 4 cr** Primarily for students in business, the social sciences and biological sciences who wish to acquire some knowledge of the techniques and applications of calculus. Topics include concepts, techniques, and applications of differential and integral calculus and multivariate calculus. Students who are preparing to major in mathematics, engineering or physical sciences should enroll in the MAT 221-MAT 222 sequence. Prereq: C or better in MAT 110 or MAT 124 or equivalent, or placement based on placement test score. Students may not earn more than six credits by taking both MAT 211 and MAT 221.

**MAT 221 Calculus and Analytical Geometry I 5 cr** Analytic geometry, functions, limits and continuity, the derivative, integrals, techniques and applications of differentiation, applications of integration, logarithmic and exponential functions and trigonometric functions. Prereq: C or better in MAT124 or MAT110 & MAT113 or equivalent, or placement based on placement test score. Students may not earn more than 6 credits by taking both MAT211 & MAT221. MS

**MAT 222 Calculus & Analytic Geometry II 5 cr** Continuation of 221. Techniques of integration, polar coordinates, conic sections, infinite series and vectors of two and three dimensions. Note: the order of topics covered in MAT 221 and MAT 222 may depend on the text used and the instructor. Prereq: a grade of C or better in MAT 221 or placement based on the department Calculus Proficiency Test or exam.

**MAT 223 Calculus & Analytic Geom III 5 cr** Continuation of MAT 222. Analytic geometry of three dimensions, functions of several variables, partial differentiation, multiple integration and introduction to differential equations. Prereq: C or better in MAT 222 or equiv. MS

**MAT 234 Calculus of Several Variables 3 cr** Continuation of MAT 222. Analytic geometry of three dimensions, functions of several

variables, multiple integration. This course is equivalent to MAT 223 without differential equations. Prereq: a grade of C or better in MAT 222 or equivalent. Students may not receive credit for both MAT 223 and MAT 234. MS

**MAT 262 Linear Algebra 3 cr** Matrix algebra, linear systems of equations, vector spaces, subspaces, linear dependence, rank of matrices, determinants, linear transformations, Eigen values and eigenvectors, diagonalization, inner products and orthogonal vectors, and symmetric matrices. Prereq: a grade of C or better in MAT 222. MS

**MAT 271 Ordinary Differential Equations 3 cr** Ordinary differential equations of the first and second order, series solutions, higher order linear equations, the Wronskian, Laplace transform and applications, numerical methods and boundary value problems. Prereq: a grade of C or better in MAT 222. MS

**MEC 201 Statics 3 cr** Principles of mechanics, force systems, equilibrium, structures, distributed forces, moments of inertia of areas, and friction. The course will serve the requirements of the several engineering curricula. Prereq: MAT 221. NS

**MEC 202 Dynamics 3 cr** Kinematics, force-mass-acceleration relations, work and energy, impulse and momentum and moments of inertia of mass. This course will serve the requirements of the several engineering curricula. Prereq: MEC 201, MAT 222. NS

**MEC 203 Strength of Materials 3 cr** Stress and strain, torsion, bending of beams, compound stresses, principal stresses, deflections of beams, statically indeterminate members, columns, elastic buckling, fatigue, creep, impact and concrete properties. Lab required if taken for 5 credits. Prereq: MEC 201. NS

**MUA 001- 002/MUA 003-004 Beginning/Elementary Piano 2 cr**

**MUS 070 Orchestra 2 cr** Open to all students by tryout. Students wanting to take this course for 1 credit must obtain cons. instr. AP

**MUS 071 Band 2 cr** Open to all students by tryout. AP

**MUS 072 Chorus 2 cr** Open to all students by tryout. AP

**MUS 074 Jazz Ensemble 2 cr** Open to all students by tryout. AP

**MUS 170 Fundamentals of Music 3 cr** This course is designed to acquaint the student with the fundamentals of music through experiences with the keyboard, rhythm instruments, singing, listening, and note reading. Required for some elementary education majors and open to the general student. Acceptable as preparation for a music major or minor program. AP

**MUS 171 Music Theory I 3 cr** A detailed study of the development of Western Music's structural techniques and basic compositional components through the study and analysis of harmony and an introduction to counterpoint. Notation, rhythm, major and minor keys, modes, root position triads, inverted chords, non-harmonic tones and an introduction to part writing will be studied. Includes keyboard work to examine, explore and understand the materials studied. Open to all students with cons. instr.. Required of students planning a music major or minor. Music majors and minors must enroll concurrently in MUS 181 to meet aural skills requirement. The Music Department recommends prior musical preparation. Prereq. Cons. instr. FA

**MUS 172 Music Theory II 3 cr** Continuation of MUS 171. Melodic harmonization, voice-leading, harmonic and rhythmic progression, dominant seventh and leading-tone seventh chords, non-dominant seventh chords, introduction to modulation, secondary dominant and leading-tone chords, introduction to two and three-part forms and counterpoint will be studied. Required of students planning a music major or minor. Music majors and minors must enroll concurrently in

MUS 182 to meet aural skills requirements. Prereq: Music 171. FA

**MUS 173 Music Literature and Appreciation 3 cr** A guide to the understanding of music through listening experiences in the various styles and historical periods. FA

**MUS 181 Aural Skills I 2 cr** Development of skills in sight-singing and ear-training. Required of students planning a music major or minor and enrolled in MUS 171. AP

**MUS 182 Aural Skills II 2 cr** Development of skills in sight-singing and ear-training. Required of students planning a music major or minor and enrolled in MUS 172. Prereq: MUS 181. AP

**MUS 271 Music Theory III 3 cr** An introduction to advanced harmony and counterpoint. Concepts of counterpoint, harmonic sequences, chromatic harmony, advanced modulation, Neapolitan and augmented sixth chords, more complex forms such as sonata, concerto, sonata-rondo and the fugue will be studied. Required of students planning a music major or minor. Concurrent enrollment in MUS 281 is strongly encouraged. Prereq: MUS 172. FA

**MUS 272 Music Theory IV 3 cr** Embellishing chromatic chords, dominant prolongation, modulation to foreign keys, harmonic sequences, chromatic voice-leading, introduction to 20th century techniques including set theory, 12-tone serial techniques, pointillism, polytonality, cluster techniques, microtones, indeterminacy and 20th century notation will be studied. Required of students planning a music major or minor. Concurrent enrollment in MUS 282 is strongly encouraged. Prereq: MUS 271. FA

**MUS 273 Jazz History and Appreciation 3 cr** An introduction to the styles and forms of jazz through a study of its history, literature, cultural influences, musical structure, and prominent performers. Includes recorded listening experiences. ES/FA

**MUS 281 Aural Skills III 2 cr** Development of aural skills in sight-singing and ear-training. Required of students planning a music major or minor and enrolled in MUS 271. Prereq. MUS 182. AP

**MUS 282 Aural Skills IV 2 cr** Development of aural skills in sight-singing and ear-training. Required of students planning a music major or minor and enrolled in MUS 272. Prereq. MUS 281. AP

**PED 005-019 Basic Physical Education Courses Open to All Students 1 cr** These courses develop skills, teach rules and prepare students for recreational enjoyment. AP

**PED 005 Basketball 1 cr**

**PED 019 Weight Training 1 cr**

**PED 124 Alcohol and Other Drugs: Awareness Alternatives 1 cr** The course will present up-to-date information on drugs and their abuse. Alternative activities such as fitness, stress management, moderation training and smoking cessation will be discussed. Opportunities for implementation of alternatives will be provided. EL

**PED 127 Fitness for Life 2 cr** A contemporary examination of the effects of lifestyle, wellness, and health promotion on the individual. Instruction in procedures for self-evaluation as well as individualization of exercise prescription for the development of fitness. Participation in a planned program of aerobic activity is required. AP

**PED 205 Athletic Injuries 3 cr** Procedures and techniques in the prevention and care of common athletic injuries. Common topics include assessment, rehabilitation, and the relationship of an athletic trainer to athletes, coaches, and administrators. Practical procedures to

be completed during regular class time. A third credit may be earned if the student enrolls in and completes the additional field work/service learning portion of the course. AP

**PED 206 Personal Health 3 cr** Examination of the various aspects of health and wellness. Topics include the components of health and wellness, stress management, psychological health, personal fitness, nutrition, weight management, violence and abuse, communication and healthy relationships, sexuality, reproductive choices, infectious and non-infectious diseases, drugs and alcohol, aging, dying and death, environmental health, and consumerism and alternate medicine choices. How these topics affect the individual and the community will also be explored. EL

**PED 209 Nutrition and Weight Control 3 cr** This course will examine the basic principles of nutrition, digestion, and metabolism and the effects of these principles on one's diet, weight, fitness level, and overall health. The functions, requirements, and applications of nutrients and nutritional needs throughout the life cycle will be studied. The course will also include the basic knowledge and application of nutrient recommendations, dietary guidelines, and interrelationships of foods. It will also examine the issues of alternative nutrition, food safety, and eating disorders. The course will include personal diet assessment and development of personal health goals.

**PED 210 Theory of Coaching 3 cr** Theory and methodology of coaching both team & individual sports. Coaching psychology, philosophy, & administrative responsibilities (skill assessment, practice/game organization, rules, fundamentals, and play of various sports) will be explored through lecture, lab, and field experience. Possible sports may include, but are not limited to: tennis, golf, wrestling, swimming, basketball, volleyball, soccer, and football. AP/EL

**PED 213 First Aid and Emergency Care 3 cr** Examines the causes, prevention and care of first aid emergencies. Topics include recognizing and responding to emergencies, checking victims, breathing and cardiac emergencies, severe bleeding, shock, injuries, medical emergencies, special situations and healthy lifestyles. Proficiency in checking victims and caring for severe bleeding and extremity injuries will be tested through skill practice. Skills in testing in clearing obstructed airways, CPR, and AED completed for the adult only. American Red Cross or American Heart Association certification can be earned. AP

**PED 217 Social Aspects of Sport 3 cr** A course focusing on sport institutions as social organizations and how they function within a culture or society. Emphasis is placed on group structure and membership, as well as group pressure, socialization, stratification and deviance as they apply to the sport's setting. Significant emphasis is placed on the role of minorities in sport. Selected topics include sport and: educational institutions, socialization, children, deviance, violence and aggression, gender and equity, race and ethnicity, social class, social mobility and stratification, economy, politics, religion, and the media. SS/ES/IS

**PHI 101 Introduction to Philosophy 3 cr** An introduction to philosophy as the activity of clarifying ideas, developing positions, and evaluating arguments on problems such as what is, what ought to be, freedom, God and knowledge. Some reference to positions of leading figures and schools of thought in the history of philosophy is usually involved. HU

**PHI 201 Asian Philosophy 3 cr** An introduction to Asian philosophy through a study of opposing views about knowledge, nature, society and the individual. Areas of emphasis may include Chinese, Indian, Japanese and Muslim thought. HU

**PHI 202 Feminist Philosophy 3 cr** (Same as WOM 202.) An introduction to feminist philosophies through a study and critique of traditional and feminist views about women, their lives, society and knowledge, with particular attention to theories of women's oppression.

**PHI 211 Elementary Logic 3 cr** Principles, standards and methods of distinguishing good reasoning from bad, as applied to deductive and inductive inferences. The course largely consists of substituting symbols for statements in arguments and understanding and assessing the logical structure of these arguments. May include a discussion of the nature and detection of fallacies and linguistic pitfalls affecting reasoning. MS

**PHI 226 Philosophical Ideas in Literature 3 cr** A study of philosophical and moral ideas as embodied in selected works of literary art: aesthetic analysis of their structure and content. HU

**PHI 241 Ethics 3 cr** Nature of moral problems and of ethical theory, varieties of moral skepticism, practical ethics and the evaluation of social institutions. HU

**PHI 243 Business Ethics 3 cr** (Same as BUS 242.) Critical discussion of ethical reasoning and moral values in business and industry; includes relevant case studies and readings. HU

**PHI 253 Philosophy of the Arts 3 cr** Examination of production, appreciation and criticism of works of art; sources and uses of standards. HU/IS

**PHS 235 Human Physiology 5 cr** An examination of the physiological processes of the human body. Students with credit in PHS 235 and ZOO 234 may not receive associate degree credit for PHS 202 and PHS 203. LEC/LAB, and may also include demonstrations, discussion and field trips. Prereq: introductory courses in CHE & BIO or cons. instr. LS/NS

**PHY 141 General Physics 5 cr** The study of mechanics, heat, wave motion and sound. Recommended for students majoring in business, elementary education, medical technology, pharmacy, pre-dentistry and pre-medical studies. Three hours of lecture and three hours of laboratory-discussion per week or equivalent. Prereq: competency at MAT 105 level. LS/NS

**PHY 142 General Physics 5 cr** A continuation of Physics 141. Electricity, magnetism, light, and atomic and nuclear physics. Three hours of lecture and three hours of laboratory-discussion per week or equivalent. Prereq: PHY 141. LS/NS

**PHY 201 General Physics 5 cr** The study of mechanics, heat, wave motion and sound. Recommended for physical science and engineering majors. Three hours of lecture, one hour of discussion and three hours of laboratory per week or equivalent. Prereq: MAT 221 or concurrent registration with cons. instr. LS/NS

**PHY 202 General Physics 5 cr** A continuation of Physics 201. Electricity, magnetism, light and nuclear physics. Prereq: PHY 201, concurrent registration in MAT 222 or cons. instr. LS/NS

**PHY 291 Topics in Physics – Beyond Recycling: Advancing Toward Sustainability 3 cr.** NS/IS (See POL 298.)

**POL 104 American Government and Politics 3 cr** Analysis of the decision-making structure and processes of American national government, including the role of parties and interest groups, and the value preferences within American society which affect the formation of public policy. SS

**POL 215 Media and Politics 3 cr** An examination of the impact mass media has had on democratic politics in the United States, including the role media plays in influencing political behavior and attitudes. Topics covered in the class include media bias, media power, use of media by government and interest groups, the role of media in campaigns and elections, and the influence of media on policy makers.

**POL 298 Special Topics – Beyond Recycling: Advancing Toward Sustainability 3 cr** This course focuses attention on issues of sustainability. Our exploration will include Energy, Population, Global Warming, Water Resources, Technology, Health, and Recycling. Each of the participating natural and social science instructors will be responsible for leading discussion in one or more of these areas and welcome input from other disciplinary perspectives. In-class laboratory exercises and hands-on activities may include experiments involving alternative energy sources, hydrogen fuel cells, solar cells, energy budgets, demonstrations of half-life, and recycling methods. SS/IS.

**PSY 201 Introductory Psychology 4 cr** Survey of major content areas in psychology. Topics include research methodology, learning, memory, cognition, biological psychology, sensation, perception, motivation, emotion, development, personality, psychopathology and social psychology. SS

**PSY 202 Introductory Psychology 3 cr** Survey of major content areas in PSY. Topics include research methodology, learning, memory, cognition, biological psychology, sensation, perception, motivation, emotion, development, personality, psychopathology and social psychology. Students may not receive credit for both PSY201&202. SS

**PSY 210 Statistical Methods in Psychology 3 cr** An introduction to descriptive and inferential statistics. Topics include measures of central tendency, measures of variability, correlation and regression, sampling distributions, and hypothesis testing procedures including t-tests and analysis of variance. Prereq: PSY 201 or 202 (C- or better) or concurrent registration & introductory college algebra, or exemption. MS

**PSY 250 Life Span Developmental Psychology 3 cr** A survey of human development theories and research in topics: biological, cognitive, emotional and social development of the individual from the prenatal period through old age. Students may not receive credit for both PSY 250 and PSY 360 or PSY 362. Prereq: PSY 201 or 202 (grade of C- or better) or cons. instr. SS

**PSY 307 Psychology of Personality 3 cr** Discussion of major theories and research in personality; may include psychoanalytic, dispositional, behavioral, cognitive, humanistic, and biological perspectives. Prereq: PSY 201 or 202 (grade of C- or better) or cons. instr. SS

**PSY 309 Abnormal Psychology 3 cr** Contemporary theory and research on abnormal behavior, includes diagnostic categories, approaches to treatment and understanding of abnormal behavior. Prereq: PSY 201 or 202 (grade of C- or better) or cons. instr. One additional course in psychology is recommended. SS

**PSY 330 Social Psychology 3 cr** Theory and research in areas such as social cognition, attitude formation and change, attribution theory, attraction, group processes, social influence, aggression and prosocial behavior. Prereq: PSY 201 or 202 (grade of C- or better) or consinstr.SS

**PSY 360 Psychology of Childhood and Adolescence 3 cr** A survey of human development theories and research in topics: biological, cognitive, emotional and social development of the individual from the prenatal period through adolescence. Students may not receive credit for both PSY 360 and PSY 250. Prereq: PSY 201 or 202 (grade of C- or better) or cons. instr. SS

**PSY 362 Psychology of Adulthood and Aging 3 cr** Topics include physical, intellectual, personal and interpersonal development, with emphasis on adjustive responses to life challenges such as career choices, marriages, parenthood, aging and dying. Students may not receive credit for both PSY 362 and PSY 250. Prereq: PSY 201/202 (grade of C- or better) or cons. instr. SS

**SOC 101 Introduction to Sociology 3 cr** Introduction to the basic concepts, theories and methods of sociology, emphasizing the significance of the self and culture, social process and organization, and forces of social stability and change. SS

**SOC 220 Sociology of Marriage and the Family 3 cr** Marriage and the family as social institutions in a changing world. Historical changes and societal variations in family patterns. Changes over the life cycle. Explores the sources and consequences of a variety of family forms. Not recommended for first-semester freshmen, except cons. instr. SS

**SOC 231 Crime and Criminal Justice 3 cr** Explores the nature of crime and reviews ideas about definitions, causes, and solutions. Includes an introduction to the day-to-day functioning of the criminal justice system, the police, lawyers, courts, and correctional personnel. Not recommended for first-semester freshmen, except with cons. instr.

**SOC 234 Sociology of Race and Ethnicity 3 cr** The experience of American racial, religious, ethnic and nationality groups. The nature of intergroup relations in the United States. Relationship of intergroup dynamics to social change, and to basic ideological, technological, and institutional structures and processes. Emphasis on social conflict over the distribution of economic and political power, family patterns, housing, education and access to the legal system. Not recommended for first-semester freshmen, except with cons. instr.. ES/SS

**SPA 101 First Semester Spanish 4 cr** For students who have had no previous training in the language. Emphasis on reading, writing, listening and speaking in Spanish. Classes also may include cultural studies of Spain and Latin America. Field trip may be required. AP

**SPA 105 Second Semester Spanish 4 cr** Continuation of SPA 101 or SPA 104. Field trip may be required. Prereq: SPA 101 or SPA 104 or cons. instr. AP

**SPA 201 Third Semester Spanish 4 cr** Reviews grammar taught during first two semesters while adding new material with some stress on idiomatic usage. All four skills (reading, writing, listening and speaking) are practiced and continued emphasis is placed on acquisition of cultural knowledge. Field trip may be required. Prereq: SPA 105 or SPA 107 or cons. instr. HU

**SPA 205 Fourth Semester Spanish 4 cr** Continuation of SPA 201 or SPA 204. Reading, writing, audio oral practice, cultural insights based on literary texts in Spanish. Field trip may be required. Prereq: SPA 201 or SPA 204 or cons. instr. HU

**SPA 225 Intermediate Conversation and Composition 3 cr** Development of written and oral proficiency through systematic exposure to modern cultural developments as found in a variety of contemporary texts. Discussion and composition exercises deal with cultural topics introduced by original authors. Prereq: SPA 205 or SPA 207 or cons. instr. HU

**SPA 299 Intermediate Independent Reading 1 cr** Individual student(s) assigned readings, reports and papers on topic determined by instructor. One-on-one meetings to be arranged. Prereq: SPA 205 or SPA 207 and cons. instr. (Associate degree designation will be determined by course content.)

**ZOO 101 Animal Biology 5 cr** General biological principles structure and function of cells, histology, embryology, heredity, ecology and evolution; survey of the animal kingdom; and structure and function of the vertebrate body. LEC/LAB, and may also include demonstrations, discussion and field trips. LS/NS

**ZOO 234 Human Anatomy 3 cr** A study of the fundamental structure and organization of the organs and systems of the human body. LEC/LAB, & may also include demonstrations, discussion & field trips. Students with credit in ZOO234 and PHS235 may not receive associate degree credit for PHS 202&203. Prereq: BIO course or consinstr. LS/NS

**ZOO 299 Read and Research in Zoology (Independent Study) 2 cr** An example of ZOO 299 is **Stream Research and Monitoring** Over the years, the Fox River area has experienced an increase in industry and a steadily growing population. Agriculture in the area has become more intense and heavily dependent on fertilizers and pesticides. The Lower Fox River area also houses the highest concentration of pulp and paper mills in the world. Over the years, these companies have dumped massive amounts of chemical waste into the Fox River. Additional pollution loads come from municipal sewage plants, urban runoff and farmland runoff. What effect is the cumulative toxin load having on living organisms in the waterways? During summer 2006, a related research question was posed about the development of fish in certain Fox River tributaries. There were significant developmental problems in several of the rivers measured. We have studied some of these same streams for several years in an attempt to determine the quality of the tributary streams that feed the Lower Fox River watershed. Several of the streams have been studied since 2003. Many of the streams and creeks in the Lower Fox River watershed are impaired due to sediment in the water (<http://dnr.wi.gov/org/gmu/lowerfox/overview.htm>). Students at UW-Fox Valley have been monitoring 12-14 Lower Fox River stream tributaries in the fall and spring for several years. The general goal of the stream monitoring project is to obtain data so that we can begin to track seasonal changes that occur in the creeks. The work involves library research about the current status of the creeks, and field research to collect data from the streams. Chemical, physical, biological and habitat assessments are made at each of the creeks.

Students work in the field to collect the data, in the lab to analyze the data, and in the library and class discussions to summarize and interpret field data. Most of the work for this class involves student teams monitoring several streams at least 2 or three times during the semester. This is an ongoing lab project. Student research groups have presented their data at 'Posters in the Rotunda' in Madison for the past 3 years. This will be a continuing project every spring and fall, and it is designed to recruit new students in the fall to continue the stream investigations. The independent study course provides students with an internship opportunity that would not otherwise be available. Most of the work is completed in the field and in the lab. Students who enroll in the stream class have previous lab science credit, so they are using real-life applications of their lab science techniques.

## COLLABORATIVE DEGREES COURSE DESCRIPTIONS



### Organizational Administration Bachelor's Degree

**Comm 214 Interpersonal Speech Communication** Examination and explanation of the components of interpersonal speech communication. Lectures, discussions, observations, and controlled experiences will enable the student to learn and apply relevant concepts and variables of human interaction in dyadic, face-to-face communication situations.

**Comm 215 Small Group Communication** Theory, practice, and instructional methods of face-to-face communication in small groups; emphasizing field, role, conflict resolution, problem solving, through group communication.

**Comm 220 Interviewing** This course will examine factors which influence successful attainment of interview objectives, which maximize information quality, and which enhance participant satisfaction. Theory and strategies appropriate to information-gathering, information-giving, personnel selection, performance appraisal, discipline, complaint and persuasive interviews will be discussed. Students will analyze professional interviews, participate in class exercises & role-playing to develop their interviewing skills.

**Comm 304 Business and Professional Speaking** An examination of the unique communication problems and practices in business and industry. Through investigation, case study and practical exercises students should understand and be able to participate effectively in a variety of communications experiences faced by managers in business and the professions.

**Comm 443 Organizational Communication** The course deals with the basic content of organizational communication: theory of communication, small groups, interpersonal communication, conflict, communication variables. Attempts to draw the link between the theoretical perspective and the pragmatic application of the topic.

#### **Liberal Studies 103 Concepts of Work and Leisure: Developing Balance in Contemporary Society**

Examines the role of work and leisure in the lives of Americans today. Focuses on the complex issues involved in our freedom, or lack of it, to determine our careers, our use of leisure time and, hence, our own life styles.

**Liberal Studies 270 Writing with Purpose-3cr.** This course offers intensive instruction in (1) writing clear, coherent, correct, persuasive prose, (2) reading and thinking critically, and (3) conducting library research and/or interviews and integrating primary and secondary sources into your own texts. The focus will be on writing clearly and purposefully, developing individuals' writing skills necessary for academic and professional success. Taught exclusively online, learners will be engaged in reading, analyzing, researching, thinking, writing, and rewriting to learn that everything written holds power to persuade, inform, or confuse by writing memos, reports, and essays.

**Liberal Studies 302 The Web of the Future: Workplace and Communication Trends-3cr.** Examines the history, operation, economics, and applications of computer technology and its significance in contemporary life. Consideration is given to a careful description of present technology and what some of the main decisions are that must be made if humanity is to utilize and control this technology.

**Liberal Studies 303 Ethnicity and Demography in Wisconsin-3cr.** Examines the historical influence of varied ethnic settlements, cultural diversity, changing economic foundations, and population shifts upon the government and politics of Wisconsin with particular reference to the Fox Valley. Elective.

**Liberal Studies 315 Managing People at Work-3 cr.** This course focuses on the human resource management component of the management process. The course includes both theory and application related to effectively managing individuals in their work roles. (Alternate course: BUS 352)

**Liberal Studies 318 Ethics & Decision Making in Organizations** Analysis of the influences on decision making in a variety of organizational contexts and the impact on individuals and society. Students will investigate how culture, science and technology, religion, politics and economy affect the decisions made at a variety of levels in organizations, and effects of those decisions. Particular focus will be on resolving ethical dilemmas which might result from value conflicts, such as between social and responsibility and financial interests.

**Liberal Studies 325 Introduction Organizational Administration-3 cr.** The course provides the student an introduction to some recent and successful theories and practices of organizational administration, including communication basics, persuasion, critical and empathetic listening, leadership development, systems and strategic thinking, planning, programming and budgeting, cognitive complexity, leadership styles and development, total quality management, the improvement of human performance, and learning organizations. The student will also have an introduction to ethics, external affairs, and crisis planning and management.

**Liberal Studies 405 Project Planning & Implementation-3 cr.** This course include the "science" of initiating, planning, executing, controlling and closing projects, following the proven structure developed by the internationally-recognized Project Management Institute. Topics also cover the "art" of time management, conflict resolution and effective communication and partnerships – methods and behaviors associated with successful projects. This course uses a series of case studies, problems and papers designed to help students demonstrate their ability to apply course topics to business settings.

**Liberal Studies 425 Senior Seminar in Organizational Administration-3 cr.** Focuses the student's prior work, both on and off campus, on the applied and the theoretical basis of the organization, of leadership, and on the efforts of people within an organization. This seminar will, through reading, class lectures and discussions, applied research and presentations, in written and oral reports, seek understanding of the theories and operational definitions of organizations and leadership. The student will be able to analyze existing organizations for problems or opportunities in organizational operation, leadership, and team efforts. The student will be able to design plans, programs, strategies, tactics, and resource requirements to accomplish predetermined goals and objectives. The student will be required to convince his/her classmates of the validity of the

findings and proposals. Students will be evaluating each other's work and that evaluation will likewise be evaluated.

**Liberal Studies 463 Budgeting & Bookkeeping for Program Managers- 3 cr.** This course provides the students an opportunity to learn the basics of budgeting and bookkeeping. The course of study will help prepare program and profit center managers to develop and manage their budget and expenditures. They will also have the opportunity to learn to use accounting information and make monetary and financial decisions. The relationship between organizations and the national economy and monetary decisions will also be discussed.

**Liberal Studies 466 Applied Data Gatherings & Analysis-3 cr.** Using data effectively in the workplace: the collection, analysis and interpretation of data for decision-making and problem solving within organizations. Topics include question posing, qualitative data gathering and analysis, quantitative data gathering and analysis, descriptive statistics, beginning inferential statistics, feasibility techniques and process analysis. This course will use an extensive series of cases and problems and conclude with student projects that demonstrate an ability to take a problem from inquiry and data gathering, through analysis and solution identification, to formal presentation.

**Psychology 363 Industrial and Organizational Psychology-3 cr.** The application of psychology to the problems of personnel management in industry, employee selection and placement, merit rating, accident reduction, training methods, and the measurement and improvement of employee morale. Prereq: PSYCH 201, PSYCH 204, or PSYCH 210.



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*A Partnership for Education in Engineering*  
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MECHANICAL ENGINEERING &  
ELECTRICAL ENGINEERING**

**EE 1210 Circuit Modeling I-3 cr.** Voltage, current, resistance and impedance. Opamps, phasors, Ohm's law, Thevenin's and Norton's theorems applied to the modeling of zero-order networks and to sinusoidal steady-state analysis. Introduction to CAD of circuits. Co-req: Calculus I.

**EE 2210 Circuit Modeling II-4 cr.** Phasors. Sinusoidal steady-state analysis and power. Resonant circuits. Mutual inductance. Transient response of linear networks with Laplace transform. Prereqs/Coreqs: EE 1210 and MATH 222.

**EE 3310 Automatic Control-3 cr.** Analysis and synthesis of signal-input, single output linear time-invariant systems are considered using classical Laplace transform methods such as root locus and frequency domain techniques. The lab experiments and computer simulations demonstrate practical application of the concepts.

**ME 2630 Thermodynamics-2 cr.** Thermodynamics of vapor and gas power cycles, air conditioning and refrigeration cycles. Ideal gas mixtures and psychrometrics. Combustion and reacting mixtures. Design projects. Prereq: ME 2630.

**ME 3030 Dynamical Systems-3 cr.** Mathematical modeling and

response of various dynamic systems including mechanical, electrical, hydraulic and pneumatic systems; first order and second order systems; multiple degrees of freedom; Laplace transforms with applications; transient, enforced and steady-state response; transfer functions, sinusoidal transfer functions and block diagrams. Prereq: MEC 203 and MAT 271.

**ME 3040 Engineering Materials-3 cr.** A study of metals, polymers and ceramics. Crystal structures, microstructures, molecular structures and imperfections. Relationship between structures and observed mechanical properties. Material failure. Coreq: MEC 203.

**ME 3230 Manufacturing Processes-3 cr.** Primary manufacturing processes including casting, rolling, and forging. Secondary processes. Overview of materials and testing. Design for manufacturing. Mechanics and economics of metal cutting, economics of process planning, principles of machine tool design. Machine tools. Automation, flexible manufacturing systems, computer numerical control. Prereq: ME 3040

**ME 3300 Fluid Dynamics-3 cr.** Fluid properties, fluid statics, fundamental equations of fluid motion, dimensional analysis, external flow and boundary layers, viscous flow in pipes, compressible flow. Coreq: ME 2630

**ME 3330 Design of Machine Elements.** Design, sizing, & detailing of machine elements such as gears, springs, and shafts, and selection of bearings and fasteners to meet specified objectives. Stress tensors, static and fatigue stress analysis, failure analysis, and safety and reliability. Introduction to finite element method. Design projects. Prereq: ME 3040 & C or better in MEC 203.

**ME 3630 Applied Thermodynamics-2 cr.** Thermodynamics of vapor and gas power cycles, air conditioning and refrigeration cycles. Ideal gas mixtures and psychrometrics. Combustion and reacting mixtures. Design projects. Prereq: ME 2630.

**ME 3640 Heat Transfer-3 cr.** One-and two-dimensional steady-state heat conduction, unsteady-state heat conduction, numerical methods in conduction heat transfer. Forced and free convection. Heat exchangers. Radiation shape factor, radiation heat exchange, and shielding. Mass diffusion, convection mass transfer, permeability. Prereq: ME 2630. Coreq: ME 3300.

**ME 3720 Mechanical Systems Lab-3 cr.** Introduction to engineering laboratory equipment, experimental procedures, report writing, automated data acquisition, and statistical analysis. Emphasis is on the experimental analysis of mechanical systems, including topics such as vibration, strain gauges, and dc motors, along with the electronics used to instrument and measure these systems. Co req: ME 3030

**ME 3730 Mechanical Systems Design-2 cr.** Development of design process through team design projects and case studies. Design considerations including performance, manufacturing, and economic considerations. Use of computers for evaluation of alternatives. Fits and tolerances. Optimization. Prereq: ME 3330.

**ME 3830 Mechanisms and Machines (formerly Theory of Machines)-2 cr.** Introduction to mechanisms. Analysis and synthesis of mechanical systems. Study of motion, velocity, and acceleration related to linkages, cams, and gears. Machine dynamics. Prereq: MEC 202 or cons. instr.

**ME 4720 Thermal Systems Lab-2 cr.** Instrumentation and measurement techniques in thermal systems; verification of basic

principles; laboratory tests on components of thermal systems; experimental approach for solving engineering problems; application of computer data acquisition and data processing. Prereqs: ME 3630 and ME 3640. Coreq: ME 3720.

**ME 4730 Thermo-Fluid Systems Design-2 cr.** Concepts of thermal systems; design of energy system components; modeling and simulation of thermal systems; application of principles in thermal science to an open-ended design project. Prereq: ME 3630 & 3640.

**ME 4930 Senior Design Project-3 cr.** Applications of creativity and synthesis. Simulation of engineering project environment. Integration of technical knowledge in an open-ended comprehensive design project. Oral and written reports. This course must be taken in the last semester of residence. Prereqs: Graduating senior, ME 3730 and ME 4730

**ME 4980 Special Topic: Computational Fluid Dynamics-3 cr.** In-depth study of a current topic of interest to the engineering profession. The topic to be covered will be identified in the course title

**Bachelor of Science Industrial Management**  
 This UW-Stout Degree partners with UW-Colleges and the Wisconsin Technical College System to offer students who have completed an A.A. or A.A.S in a technical field the opportunity to continue studies toward a bachelor's degree.  
 Visit [www.uwfox.uwc.edu/AdmReg/bachdeg.html](http://www.uwfox.uwc.edu/AdmReg/bachdeg.html)

**HIS 384 Women's Rights and Feminism in the United States**  
 From the American Revolution through contemporary feminist issues.

**SOC 300 The American Community** Community organization and social processes that influence community behavior and change. Prereq: 101 or 102 or cons instr. GDR:SS1



This is an exciting teacher licensure program specifically designed for working professionals with a bachelors degree and at least five years of work experience who desire a career teaching secondary level (middle and /or high school) mathematics or science.  
 Visit [www.uwfox.uwc.edu/AdmReg/bachdeg.html](http://www.uwfox.uwc.edu/AdmReg/bachdeg.html)

**Coursework-13 credits**

<b>Course Number</b>	EDU 201	EDU 211	EDU 300	EDU 230	Reading 440
<b>Course Title</b>	Concepts/Issues & Field Experience	Act! Orientation	The Exceptional Individual	Educational Psychology	Reading in the Content Area
<b>Term(s) Offered</b>	Fall and Spring	Winterim Summer	Fall, Spring, & Summer	Fall and Spring	Spring
<b>Credits</b>	3 UWC	1 UWC	3 UWC	3 UWC	3 UWO
<b>Course is offered</b>	Face-2-Face in classroom setting only	Face-2-Face in classroom setting only	Face-2-Face Online Independent	Face-2-Face Online Independent	Face-2-Face in classroom setting only

**Pedagogy-13-19 credits**

Math Methods 3 UWO Credits	Science Methods 3 UWO Credits	Student Teaching Full time 18 weeks 10 UWO Credits
<i>Fall Face-2-Face</i>	<i>Fall Hybrid</i>	<i>Fall Applications due March &amp; Spring Application due October</i>