

University Curriculum

Freshman Orientation Workbook: 2009

Welcome to the University Curriculum. We commend you on deciding to explore your interests and the variety of majors that are available to you at WMU. Exploration gives you the opportunity to look deeply into your area(s) of interest, so you can make an informed decision about classes and majors.

As your academic advisors, we want to assist you with your exploration. We want you to get involved in the process by taking classes which will give you an introduction to a particular major.

Our advising staff will help you design a first-year program that will:

- Help you choose a major by encouraging you to explore options.
- Begin to fulfill University requirements in skill development and General Education.
- Help you appreciate the University's insistence upon a balance between specialization (your major) and generalization (General Education and electives).

Please prepare to register for classes by doing the following:

- 1. Select at least 8 courses from this workbook that interest you and list them on the form on the next page.**
- 2. Print out the form and bring it to orientation. You will register for classes based on class availability.**

***Bring your BroncoNet ID and password to New Student Orientation.
(these were mailed to your home address.)***

***You will not be able to register for classes without them.
We are not able to look them up for you.***

Complete this form and bring to New Student Orientation

8 General Education courses

*I would like to take***

| Course Dept & Number (i.e. PSY 1000) | General Education area or proficiency it fills** |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

****You may choose more than one class from each area. This is a preliminary list, which you will narrow down to 4-5 classes, based on availability, at Orientation.**

Please list below:

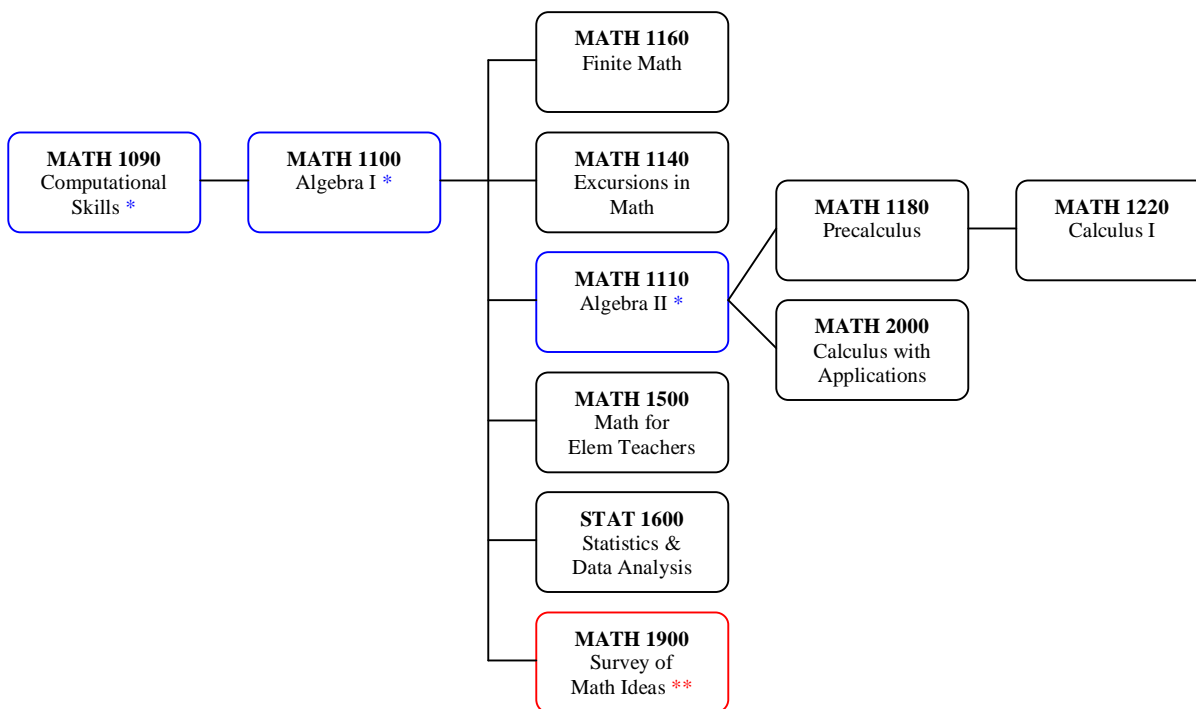
College classes you are transferring in: _____

AP or IB tests you have taken: _____

Electives you might want (i.e. band, choir): _____

Majors you would like to explore: _____

The Mathematics Menu for Entering Freshmen



* Does not fulfill general education requirement.

** Available only to students in the Honors College.

Recommended or required freshman mathematics courses for some curricula:

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|--------------------------------|---|
| Aviation | MATH 1110 or 2000 (based on placement) |
| Business | MATH 1160 or 1180 (based on placement) |
| Elementary Education | MATH 1500 (must be Elementary Ed major/minor to take) |
| Engineering | MATH 1110 or 1180 or 1220 (based on placement) |
| Science and Mathematics | MATH 1110 or 1180 or 1220 (based on placement) |
| Social Sciences | STAT 1600 recommended |

Note: Students who place at MATH 1090 and/or MATH 1100 must complete those courses before taking any of the above courses.

Freshman-Level General Education Classes

(Credit hours are shown in parentheses)

To fulfill WMU's general education requirements, you need to take one class from each proficiency area and one class from each distribution area at some point before you graduate.

Proficiency 1 College-Level Writing (3-4 Hrs)

ENGLISH

ENGL 1050 *Thought and Writing (4)* Develops students' sense of language as a means of shaping and ordering experience and ideas, as well as imagination, thought, organization, and clarity in their written work. Fulfills the University Intellectual Skills college level writing requirement..

Proficiency 3 College-Level Math/Quantitative Reasoning (3-4 Hrs)

(Many majors are specific about which course to take in this proficiency. You may want to wait on taking a class in this proficiency until you are surer of your major.)

MATHEMATICS

MATH 1140 *Excursions in Mathematics (3)* Intended for students whose programs of study have no further mathematics requirements. This course covers the use of mathematics in the world around us, including compound interest and monetary growth; planning and scheduling; collecting and interpreting data; games and decision making; measurement and geometry; and patterns and art. Prerequisite: MATH 1100 or placement.

MATH 1160 *Finite Mathematics and Applications (3)* Focuses on sets, relations and functions; systems of linear equations and inequalities; vectors and matrices; concepts of probability; random variables and distribution functions; and applications of linear algebra and probability. Required of students intending a business major. Prerequisite: MATH 1100 or placement.

MATH 1180 *Precalculus Mathematics (4)* Provides the basic algebraic and trigonometric concepts necessary for calculus. Topics include: real numbers, inequalities, coordinate systems, functions, polynomials, solutions of polynomial equations, exponential and logarithmic functions, trigonometry and trigonometric functions.. Prerequisite: MATH 1110 or placement.

MATH 2000 *Calculus with Applications (4)* A terminal one-semester course in calculus with emphasis on techniques and applications. Topics include functions, limits, differentiation, integration and applications. Prerequisite: MATH 1110 or placement.

STATISTICS

STAT 1600 *Statistics and Data Analysis (3)* Introduction to statistics with an emphasis on data analysis and graphical presentation. Extensive use will be made of the computer to prepare results. Topics include data collection, sampling and experimentation, descriptive statistics, statistical graphics, normal distribution, formal statistical inferences. Prerequisite: MATH 1100 or placement.

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Proficiency 4 Enhanced Proficiency (3-8 Hrs)

(Many majors are specific about which course to take in this proficiency. You may want to wait on taking a class in this proficiency until you are more sure of your major.)

MATHEMATICS

- MATH 1220 *Calculus I (4)* The first of a two-semester sequence in differential and integral calculus: functions, limits, continuity, techniques and applications of differentiation, integration, trigonometric, logarithmic and exponential functions. Prerequisite: MATH 1180 or placement.
- MATH 1700 *Calculus I, Science & Engineering (4)* The first of a two-semester sequence in differential and integral calculus which emphasizes application and preparation for science and engineering: vectors, functions, limits, continuity, techniques of differentiation, integration, and trigonometric, logarithmic and exponential functions. Prerequisite: MATH 1180 or placement in MATH 1220.
- MATH 2000 *Calculus with Applications (4)* A terminal one-semester course in calculus with emphasis on techniques and applications. Topics include functions, limits, differentiation, integration and applications. Prerequisite: MATH 1110 or placement.

PHILOSOPHY

- PHIL 2200 *Critical Reasoning (3)* A study of extended arguments aimed at helping students develop the skills necessary for understanding, analyzing, and evaluating argumentative rhetoric, including argument identification and structure, deduction and induction, premise verification, and informal fallacies.
- PHIL 2250 *Deductive Logic (3)* A study of the rules and techniques of deductive reasoning. Topics include syllogistic reasoning and the logic of propositions, as applied to everyday reasoning.

COMMUNICATIONS

- COM 1040 *Public Speaking (3)* Application of principles of communication underlying effective oral presentations, with attention given to speaking in business, professional, and public settings. Includes practice in preparing, presenting and evaluating speeches and other forms of oral presentations.
- COM 1700 *Interpersonal Communication I (3)* An introductory course in communication theory and practice in which students utilize their powers of speech to increase their effectiveness in interpersonal relationships through understanding of self and others.

FOREIGN LANGUAGES:

Arabic, Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, or Spanish

Area 1 Fine Arts (3-4 Hrs)

ART

- ART 1200 *Introduction to Art (3)* An introduction to painting, architecture, sculpture, and the crafts. Enables the non-art student to develop an art vocabulary and gain insights into humankind's quest for creative expressions.
- ART 1300 *Studio Experience (3-D) (3)*
ART 1400 *Studio Experience (2-D) (3)*
These two courses provide hands-on experiences in clay, wood, and metal (ART 1300) and painting/drawing (ART 1400).
- ART 1480 *Direct Encounter with the Arts (4)* Course uses a direct approach to introduce students to their cultural world by guiding them through first-hand experiences in cinema, photography, theatre, sculpture, music, poetry, dance and architecture.
- ART 2200 *History of Art (3)*
ART 2210 *History of Art (3)*
ART 2200 surveys art from prehistoric ages to the Renaissance. ART 2210 surveys from the Renaissance through the contemporary period.

CHINESE

- CHIN 2800 *Chinese Calligraphy (3)* Students learn the art of calligraphy.

DANCE

- DANC 1450 *Experiencing Dance (3)* An introduction to the art of dance through historical and multicultural perspectives including direct experiences in the studio and viewing of live and recorded performances.

EDUCATION AND PROFESSIONAL DEVELOPMENT

- ED 2300 *The Nature of Creativity (3)* Explores the nature of creativity—its processes, products, characteristics, values, and relationship to humans and society. Growth in aesthetic sensitivity, personal interaction, self-confidence, and ability to solve problems creatively are the objectives of this course.

ENGLISH

- ENGL 1100 *Literary Interpretation (4)* An introduction to the study of literature aimed at developing sensitivity and skill in the critical interpretation of poetry, drama, and prose fiction. This is the first course for the English major, but is open to all. Prerequisite: "B" or better grade in ENGL 1050.
- ENGL 2100 *Film Interpretation (4)* Studies the motion picture as an art form. Films shown in class twice per week. Discussion sessions held in addition to viewing sessions.

MUSIC

- MUS 1500 *Music Appreciation: Live Music (4)* An introduction to music and music literature. You will attend several concerts and recitals on campus. You will sample musical styles and learn to enjoy music both visually and aurally through a variety of listening experiences.
- MUS 1510 *Music Appreciation: Jazz/Pop (4)* A study of the development of jazz from the beginning to the present and its importance as an American art form.
- MUS 1520 *Rock Music: Genesis and Development (3)* A study of rock and roll music since its inception in the mid-1950s, the impact of Black rhythm and blues, jazz forms, and radio and television upon early rock, as well as further evolutionary developments such as “doo-wop,” soul music, folk rock, psychedelic rock, jazz rock, the various English schools, heavy metal, and punk styles.

THEATRE

- THEA 1000 *Introduction to Theatre (3)* Students attend theatre performances and have opportunities to participate in University Theatre. Considers theatre as part of the student’s cultural heritage and liberal arts background.

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| Area 2 Humanities (3-4 Hrs) |
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ENGLISH

- ENGL 1120 *Literary Classics (4)* Readings in selected literary masterpieces from Homer to the present. For the general student as well as the potential English major.
- ENGL 2110 *Folklore and Mythology (4)* Exploration of folklore and mythology from around the world and through the ages using poetry, fiction, film, and other materials.
- ENGL 2520 *Shakespeare (4)* Prerequisite is ENGL 1100 from Area 1 or AP equivalent. Studies selected tragedies, histories, and comedies.

HISTORY

- HIST 1000 *Early Western World (3)* A survey of major developments in European civilization from ancient Greece and Rome through the nineteenth century.
- HIST 1010 *Modern Western World (3)* A survey of major developments in European civilization since the late nineteenth century.
- HIST 1450 *Heroes and Villains in the Middle Ages (3)* This course is identical to MDVL 1450 below. Studies the medieval roots of the individual, social, and institutional ideals of Western culture.

MEDIEVAL STUDIES

- MDVL 1450 *Heroes and Villains of the Middle Ages (3)* See description for HIST 1450 above.

PHILOSOPHY

- PHIL 2000 *Introduction to Philosophy (4)* An introduction to the nature of philosophy by a consideration of major types of philosophical questions, such as the principles of rational belief, the existence of God, the nature of knowledge, and the problem of truth and verification. Selected texts from representative philosophers are used to define the questions and to present typical answers.
- PHIL 2010 *Introduction to Ethics (4)* An introduction to the philosophic study of morality. Deals with questions such as: What is the good life? Why should I be moral? What is the meaning of right and wrong?

COMPARATIVE RELIGION

- REL 1000 *Religions of the World (4)* Studies how various religious traditions conceive of gods and world order, founders and saviors, religious practices and communities.

WOMEN'S STUDIES

- WMS 1000 *Media and the Sexes (3)* Investigates how films, television, music videos, and advertising present images of women and men to different audiences.

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| Area 3 The United States: Cultures and Issues (3-4 Hrs) |
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AFRICANA STUDIES

- AFS 2000 *Intro and Foundations to Africana Studies (3)* Provides an overview of the origins of black people, the philosophical underpinnings of the discipline, and the evolution of Africana Studies. Covers African civilization in the western hemisphere, including folklore, mythology, customs, rise of Black nationalism, role of black consciousness, and present day alternatives.

ENGLISH

- ENGL 2220 *Literatures and Cultures of the U.S. (4)* Considers the perspectives and sustaining values of the varied cultures which comprise the United States of America and the challenges, problems, and opportunities of a pluralistic American society.
- ENGL 2230 *Black American Literature (4)* A survey of important black American writers and the historical development of the black experience in American literature and culture.

HISTORY

- HIST 2100 *American History to 1877 (3)* General survey of United States history from colonial times to the late nineteenth century.
- HIST 2110 *American History Since 1877 (3)* General survey of United States history with emphasis on the twentieth-century.
- HIST 2120 *American Culture (3)* Major concepts in American life as seen from the perspective of literature, the arts, and mass media, and the role of these forms of communication on the development of public historical consciousness.

POLITICAL SCIENCE

PSCI 2000 *National Government (3)* An introductory survey of American national government. Introduces principles and theories of American government, explores the political process, describes the structure, and illustrates its functions.

SPANISH

SPAN 2750 *Latino Writing/Latino Culture (3)* This course, taught in English, emphasizes the diverse nature of Latino writing and Latino culture by focusing on representative literary texts illustrative of the Hispanic role within contemporary United States society. It seeks to explain not only the relevance of this presence, but also the complexities inherent to biculturalism and bilingualism as experienced by those communities depicted in the works of prominent authors. This course does not count toward a Spanish major or minor.

THEATRE

THEA 1050 *Introduction to African-American Theatre (3)* A survey/lecture course from an African-American perspective examining the Black American life as evidenced through its theatre, with emphasis on history, philosophy, criticism, and concerns.

WOMEN'S STUDIES

WMS 2000 *Introduction to Women's Studies (4)* This interdisciplinary core course in Women's Studies provides analytical frameworks for the study of gender and gender-defining institutions, focusing on women in American society.

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| Area 4 Other Cultures and Civilizations (3-4 Hrs) |
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ANTHROPOLOGY

ANTH 1200 *Peoples of the World (3)* A survey of the rich variety and range of non-Western peoples throughout the world, with emphasis on the role of culture in shaping human thought and behavior.

ARABIC

ARAB 2750 *Life and Culture of the Arabs (3)* Taught in English, this course studies history, religions, geography, arts, politics, languages, and literatures of the Arab world, past and present.

ART

ART 2230 *Asian Art (3)* Investigates the history of Asian art from prehistory to the present, including the cultures of China, Japan, Korea, East Asia, and India, including historical and political ideas.

CHINESE

CHIN 2750 *Chinese Life and Culture (3)* Taught in English, this course covers fundamental themes of Chinese life and culture, past and present, as illustrated in art, religion, philosophy, literature.

FRENCH

FREN 2750 *Francophone Culture (3)* This course, taught in English, is an introduction to various aspects of the culture of non-European countries and regions in which the French language plays a significant role. It will offer a critical and historical perspective on the cultural and social effects of colonialism and decolonialism. This course does not count toward a French major or minor.

INTERNATIONAL STUDIES

INTL 2000 *Introduction to Global and International Studies (3)* Introduction to this academic field of inquiry, with emphasis on historical development of the global system, global economy and society, environmental conditions and awareness, mass communications, technology, and enterprise. Explores relationships between globalizing forces and countervailing influences of regional and cultural identity.

JAPANESE

JPNS 2750 *Japanese Language & Culture (3)* Taught in English, this course covers linguistic, literary, philosophic, artistic, and religious themes. The goal is to introduce students to fundamental components of Japanese culture in such a way as to demonstrate the differences from the Western heritage as well as common universal human values.

Area 5 Social and Behavioral Sciences (3-4 Hrs)

AFRICANA STUDIES

AFS 2100 *Forms of Black Consciousness (3)* Focuses on the history of Black consciousness in the African Diaspora from the seventeenth to twentieth century. Themes include Africa in African American thought and culture, naming and identity, feminism and gender, movement and migration, and the rhetoric of freedom in Black ideology.

ANTHROPOLOGY

ANTH 1100 *Lost Worlds/Archaeology (3)* An introduction to the archaeological record relating to the development of culture from its stone age origins through the development of village agriculture and the beginnings of urban life.

ANTH 2100 *Introduction to Archaeology (3)* The science of archaeology is explored in terms of the methods and concepts used to discover and interpret past human behavior. Select portions of the Old and New World prehistoric cultural sequences provide the frame of reference.

ANTH 2400 *Principles of Cultural Anthropology (3)* An introduction to the basic concepts, theoretical approaches, and methodological strategies employed in the study of traditional and contemporary sociocultural systems throughout the world. An excellent course for the serious beginning social science student.

BUSINESS

BUS 1750 *Business Enterprise (3)* Introduction to the development and value of business institutions in society. Students examine the dynamics of the business world and demonstrate the ability to identify and interpret essential business concepts.

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COMMUNICATIONS

COM 2000 *Introduction to Communication Theory (3)* A study of communication models and theories which are common to the fields of interpersonal, group, organizational, public, and mass communication. A required course for students considering any major within the Communications Department.

GEOGRAPHY

GEOG 1020 *World Geography through Maps & Media (3)* An introduction to the geography of the earth. Includes descriptive physical characteristics of continents and countries, major urban concentrations, and man-land relationships which reflect cultural preferences. Includes audiovisual and map study activities.

HEALTH, PHYSICAL EDUCATION, AND RECREATION

HPER 1700 *Introduction to Leisure/Recreational Services (3)* Provides an introduction to the field of recreational services and the role of leisure in society. Current trends, job opportunities in various settings, programming, and leadership will be discussed.

OCCUPATIONAL THERAPY

OT 2250 *Growth, Development, and Aging (3)* A study of physical, mental, emotional, and social patterns of growth, development, and aging. Aspects to be given special emphasis for the occupational therapy student include motor development, physiology of aging, growth patterns, and functional development in any of the above aspects.

PUBLIC ADMINISTRATION

PADM 2000 *Introduction to Nonprofit Leadership (3)* An overview of American nonprofit organizations, including historical and philosophical foundations, career development and exploration, attributes of successful nonprofit leaders, youth and adult development, and program planning.

POLITICAL SCIENCE

PSCI 2400 *Comparative Politics (3)* Studies the major types of political systems in the modern world, including their guiding ideologies and historical/social origins.

PSCI 2500 *International Relations (4)* A study of the nature of the international community and the forces which produce cooperation and conflict. Particular attention is given to analyzing power in terms of its acquisition and uses.

PSYCHOLOGY

PSY 1000 *General Psychology (3)* A social and behavioral survey of major topics in psychology, including learning, motivation, intelligence, personality, mental illness, and social relations. Required for Psychology majors and minors.

SOCIOLOGY

SOC 2000 *Principles of Sociology (3)* An introduction to and survey of the discipline of sociology and its major fields of study. Required for Sociology majors and minors.

Area 6 Natural Sciences with Laboratory (3-4 Hrs)

ANTHROPOLOGY

ANTH 2500 *Introduction to Biological Anthropology (4)* A survey of physical anthropology, evolutionary theory, hominid and primate evolution, the living primates, human osteology, human genetics, and population variation.

BIOLOGICAL SCIENCES

BIOS 1050 *Environmental Biology (3)* This ecology course will examine the relationships among living organisms including humans and their environment. Credit applies for General Education Area 6 if taken with BIOS 1100.

BIOS 1100 *Biology Laboratory (1)* Designed as a companion to BIOS 1050 or BIOS 1120. Provides hands-on experiences in environmental and human biology. Experiments involve the use of scientific methodology and instrumentation to collect, analyze, interpret data, and draw conclusions about life processes, basic biological principles, and the interaction of people and their environment. Corequisite or prerequisite: BIOS 1050 or 1120.

BIOS 1120 *Principles of Biology (3)* Foundation concepts in cell biology, human anatomy and physiology, botany, human genetics, microbiology, and ecology are presented for students who do not have strong biology and chemistry backgrounds. Credit applies for General Education Area 6 if taken with BIOS 1100.

CHEMISTRY *Math placement determines chemistry placement.*

CHEM 1100 & 1110 *General Chemistry I (3) & Lab (1)* The theory and fundamental principles of chemistry are emphasized in this foundation course, which serves primarily those who intend to enroll for more than two semesters of chemistry. Prerequisite: MATH 1110. Good idea to take MATH 1180 concurrent with CHEM 1100.

GEOGRAPHY

GEOG 1050 *Physical Geography (4)* A study of the physical environmental systems of our earth. Examines the seasonal and latitudinal distribution of solar energy; analyzes the elements of weather, climate, vegetation, and soils; considers the earth's major landforms and the processes which shape them. Map use and laboratory work are integral to this course.

GEOSCIENCES

GEOS 1000 *Earth Studies (4)* Students are introduced to the origin of the solar system and the earth-moon system, with emphasis on humankind's place in the universe. Students will investigate the materials and processes that shape the earth and the geologic hazards that affect our lives. Plate tectonics and the origin and evolution of life will frame the course.

GEOS 1300 *Physical Geology (4)* A study of the common rocks and minerals and the geologic processes acting upon these materials that form the structure and surface features of the earth. A good course to take if you are thinking of majoring in Geology.

GEOS 2000 *Evolution of Life – A Geological Perspective (4)* A consideration of the diversity of life through time with emphasis on the geological constraints on evolution. Evolutionary processes and patterns of selected fossil groups from single-celled organisms to vertebrates. Co-evolution of plants and animals and mechanisms of extinction will be discussed.

IMAGING

IMAG 1500 *Introduction to Imaging (4)* An introductory course describing the print/imaging industry, including image design, preparation, generation, photo imaging by photomechanical and desktop systems, proofing, presswork, and bindery. Lecture is on the main campus, and lab sections are at the Parkview (CEAS) campus.

PHYSICS

PHYS 1040 & 1030 *Introduction to the Sky and Solar System (3) Lab (1)* An introduction to the night sky and our solar system. Topics include the cycles of the sun, moon, planets, and constellations; the history of astronomy; properties of light and telescopes; properties of the planets and the sun; asteroids, meteorites, and comets; and the creation and evolution of the solar system. Prerequisite: MATH 1100 or equivalent.

PHYS 1060 & 1050 *Introduction to Stars and Galaxies (3) Lab (1)* An introduction to the origin and evolution of stars, galaxies, and the universe. Topics include the basic properties of stars; the birth, life, and death of stars; the origin of elements; the interstellar medium; structure and evolution of the Milky Way and other galaxies; the origin and fate of the universe. Prerequisite: MATH 1100.

PHYS 1070 & 1080 *Elementary Physics (4) Lab (1)* This course surveys physics from mechanics to modern physics in one semester; designed for students in curricula requiring a one-semester general college physics course. Prerequisite: MATH 1100.

PHYS 1130 & 1140 *General Physics I (4) Lab (1)* A general, non-calculus physics course in the principles and practical application of mechanics, sound, and heat. Prerequisite: MATH 1100.

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| <p style="text-align: center;">Area 7 Natural Science and Technology: Applications and Implications (3-4 Hrs)</p> |
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ANTHROPOLOGY

ANTH 1500 *Race, Biology and Culture (3)* This course is an introduction to the anthropological study of human biological variation in modern populations. We will examine from a biocultural perspective how human populations adapt to life in difficult environments.

CHEG 2610 *Environmental Engineering (3)* Introduction to chemical engineering, including process safety, basic laws at the foundation of chemical engineering, units and measurements, and chemical equipment and instruments used in the process industries. Corequisites: CHEM 1100, CHEM 1110 and IME 1020

COMMUNICATIONS

COM 2400 *Introduction to Media and Telecommunications (3)* Studies the way media and telecommunication technologies are organized and how they impact personal attitudes and life styles.

COMPUTER SCIENCE

CS 1000 *Fluency with Information Technology (3)* Foundational concepts of information technology, plus the opportunities and limitations of computer systems. Computer applications such as operating systems, file managers, Internet browsers, search engines; email and other network applications; and word processing, spreadsheet, database and presentation software. Not for use toward computer science major or minor program requirements.

GEOGRAPHY AND GEOSCIENCE

GEOG 1000 *World Ecological Problems and Man (4)* Studies the interactions between human beings and the environment. Combines scientific and non-technical appraisals of processes and problems dealing with the question of environmental quality.

GEOS 1500 *Earth Hazards and Disasters (3)* An introduction to the major geologic hazards affecting the earth. Impacts, earthquakes, volcanoes, tsunami and coastal hazards, mass wasting, and flooding will be discussed. Emphasis is placed on understanding how and why these hazards occur, how these hazards affect the lives of citizens in the United States and around the world, and how geoscience and technology can be used to identify and manage potential hazards.

INDUSTRIAL AND MANUFACTURING ENGINEERING

IME 1220 *Automobile in Society (3)* Principles of physics, chemistry, biology, and technology are applied to the automobile. Topics include occupant protections, vehicle control, power production, global warming, power transmission, energy storage and retrieval, air pollution, use of natural resources, vehicle selection, purchase options, insurance, productivity, maintenance, and a history of the industry's record of successes and failures.

IME 1500 *Introduction to Manufacturing (3)* Analysis and application of a broad range of modern manufacturing techniques utilized in industry. Exploration of production methods as influenced by historical impact, materials, processes, productivity, ethics, and social/environmental concerns. The global challenges to product design, performance, quality, and economic considerations will be investigated.

MECHANICAL ENGINEERING

ME 2200 *Processes and Materials in Manufacturing (4)* Manufacturing principles and organization; principal processes used to make metal, plastic and ceramic parts; design considerations for computer integrated manufacturing; simultaneous engineering.

PAPER SCIENCE

PAPR 1600 *Introduction to Environmental Technology (3)* Designed for non-engineering majors, the course presents the major concepts and tools of environmental control applied to industrial and municipal emissions. The sources, behavior, effects and detection of pollutants are studied along with effluent management methods and regulations.

SPEECH PATHOLOGY AND AUDIOLOGY

SPPA 2000 *Communication Disorders and Sciences (3)* Provides a broad view of the nature of language as the primary means of human communication, its normal acquisition, the common disorders of speech, language and hearing, the social and emotional consequences of these disorders, and individual and societal ways of dealing with communication disorders.

Area 8 Health And Well-Being (2-3 Hrs)

ALCOHOL AND DRUG ABUSE

ADA 2250 *Drug Use: Personal and Social Impact (3)* Increases understanding of substance abuse through the public health disease model with an emphasis on psychological, physiological, and social consequences of use and abuse. Provides an overview of prevention, case findings, and treatment strategies.

HEALTH, PHYSICAL EDUCATION AND RECREATION

HPER 1110 *Healthy Living (2)* Provides information necessary for positive health decision making. and explores consequences of poor decisions (e.g., substance abuse, HIV/AIDS, sexually transmitted diseases, depression, lifestyle related diseases, stress, eating disorders, etc.).

HOLISTIC HEALTH CARE

HOL 1000 *Choices in Living (3)* Focuses on the relationship between individual choices, social responsibilities, and optimal human functioning. Values clarification, motivation, and behavior change as well as health and social issues will be examined. This course is especially valuable for students interested in health and human services professions.

PHYSICAL EDUCATION—GENERAL (lecture and activity)

PEGN 1700 *Health and Wellness-Aerobics (2)*
PEGN 1710 *Health and Wellness-Water Aerobics (2)*
PEGN 1720 *Health and Wellness-Circuit Fitness (2)*
PEGN 1730 *Health and Wellness-Jogging (2)*
PEGN 1740 *Health and Wellness-Walking (2)*
PEGN 1760 *Health and Wellness-Racquet Sports (2)*
PEGN 1770 *Health and Wellness-Climbing Techniques (2)*
PEGN 1800 *Health and Wellness-Beginning Swimming (2)*
PEGN 1810 *Health and Wellness-Intermediate Swimming (2)*
PEGN 1820 *Health and Wellness-Swim Conditioning (2)*