Mathematical, Physical & Biological Sciences (continued)

GEOL 1000. The Earth. (3-0) Cr. 3.0. F.S.SS.
How does the earth work, what is it made of, and how does it change through time? Plate tectonics, Earth materials, landforms, climate, and natural resources. Emphasis on the observations and hypotheses used to interpret Earth system processes. Students may also enroll in GEOL 100L.

GEOL 1010. Environmental Geology: Earth in Crisis. (Cross-listed with ENV S). (3-0) Cr. 3.0. F.S.
An introduction to geologic processes and the consequences of human activity from local to global scales. Discussion of human population growth, resource depletion, pollution and waste disposal, global warming and ozone depletion, desertification, and geologic hazards such as earthquakes, landslides, flooding, and volcanism.

GEOL 2010. Geology for Engineers and Environmental Scientists. (2-2) Cr. 3. F.
Introduction to Earth materials and processes with emphasis on engineering and environmental applications.

MATH 1040. Introduction to Probability and Matrices. (3-0) Cr. 3.0. F.S.
Prereq: Satisfactory performance on placement exam, 2 years of high school algebra, 1 year of high school geometry
Permutations, combinations, probability, binomial and multinomial theorems, matrices, expected value.
Either MATH 104 or 150 may be counted toward graduation, but not both.

MATH 1050. Introduction to Mathematical Ideas. (3-0) Cr. 3.0. F.S.
Prereq: Satisfactory performance on placement exam, 2 years of high school algebra, 1 year of high school geometry
Topics from mathematics and mathematical applications with emphasis on their nontechnical content.

MATH 1400. College Algebra. (3-1) Cr. 3.0. F.S.SS. Prereq: Satisfactory performance on placement exam, 2 years of high school algebra; 1 year of high school geometry
Coordinate geometry, quadratic and polynomial equations, functions, graphing, rational functions, exponential and logarithmic functions, inverse functions, quadratic inequalities. Students in the College of Liberal Arts and Sciences may not count MATH 140, 141, 142, or 195 toward Group III of the General Education Requirements.

Recommended Courses

Mathematical, Physical & Biological Sciences (continued)

BIOL 2110. Principles of Biology I. (3-0) Cr. 3.0. F.S. Prereq: High school biology and chemistry or credit or enrollment in CHEM 163 or 177.
Introduction to the nature of life, including the cellular basis of life; the nature of heredity, evolution; diversity of microbial, plant, and animal life; and principles of ecology. Intended for life science majors. First of core series of required courses for the biology major.

BIOL 2550. Fundamentals of Human Anatomy. (3-0) Cr. 3.0. F. Prereq: High School Biology and Chemistry, or BIOL 101
An introduction to human anatomy, beginning with cells and tissues, surveying all body systems, relating form to function. Systems covered include: integumentary, bones and joints, muscles, nervous, sensory, endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive. Does not satisfy biology major requirements.

CHEM 1600. Chemistry in Modern Society. (3-0) Cr. 3.0. F.S.
Aspects of chemistry visible to a non-scientist in our society. A survey of selected areas of chemistry with emphasis on the interface between chemistry and other fields of human activity.

FSHN 1010. Food and the Consumer. (3-0) Cr. 3.0. F.S.SS. Prereq: High school biology and chemistry or 3 credits each of biology and chemistry

FSHN 1670. Introduction to Human Nutrition. (3-0) Cr. 3.0. F.S.SS. Prereq: High school biology or 3 credits of biology
Understanding and implementing present day knowledge of nutrition. The role of nutrition in the health and well-being of the individual and family.
Recommended Courses

Mathematical, Physical & Biological Sciences (continued)

**MATH 1450. Applied Trigonometry.** (2-1) Cr. 3.0. F.S.S.S. Prereq: Satisfactory performance on placement exam, 2 years of high school algebra, 1 year of high school geometry; or enrollment in MATH 140

Mathematical ideas regarding the conception of space. General Trigonometry, with an emphasis on the calculation of lengths, areas, and angles. The Law of Sines and the Law of Cosines. Polar, cylindrical, and spherical coordinate systems. Conic sections and Quadric Surfaces. Students in the College of Liberal Arts and Sciences may not count Math 145 toward the General Education Requirements. Only one of Math 143 and 145 may count toward graduation.

**MATH 1500. Discrete Mathematics for Business and Social Sciences.** (2-1) Cr. 3.0. F.S.S.S.

Prereq: Satisfactory performance on placement exam, 2 years of high school algebra, 1 year of high school geometry
LInear equations and inequalities, matrix algebra, linear programming, discrete probability. Either MATH 104 or MATH 150 may be counted toward graduation, but not both.

**MATH 1510. Calculus for Business and Social Sciences.** (2-1) Cr. 3.0. F.S.S.S.

Prereq: Satisfactory performance on placement exam, 2 years of high school algebra, 1 year of high school geometry
Differential calculus, applications to max-min problems, integral calculus and applications. Will not serve as prerequisite for MATH 265 or MATH 266. Only one of MATH 151, MATH 160, the sequence MATH 165-MATH 166, or the sequence MATH 181-MATH 182 may be counted towards graduation.

**MICRO 1010. Microbial World.** (3-0) Cr. 3.0. F. Prereq: High school biology or equivalent
Introduction to the importance of viruses, bacteria, fungi, archaea and parasites both to humans and to the biosphere. Topics include past and present microbial impact on humans and society, ecology and diversity of microbes, biotechnology and microbial impact on the biosphere.

**MTEOR 2060. Introduction to Weather and Climate.** (Cross-listed with AGRON). (3-0) Cr. 3.0. F.S.
Basic concepts in weather and climate, including atmospheric measurements, radiation, stability, precipitation, winds, fronts, forecasting, and severe weather. Applied topics include global warming, ozone depletion, world climates and weather safety.

**PHYS 1010. Physics for the Nonscientist.** (3-0) Cr. 3.0. F.S.
Survey of the principal areas of both classical and modern physics. Emphasis on the nature of the physical universe and the application of physical principles to life in the modern world. Not suitable to meet a general physics requirement for natural science majors.

Mathematical, Physical & Biological Sciences (continued)

**PHYS 1310 & 1310L. General Physics.** (4-2) Cr. 5.0. F.S.S.S. Prereq: 1½ years of high school algebra, 1 year of geometry; 1 semester of trigonometry

General background in physical concepts, principles, and methods for those who do not plan advanced study in physics or engineering. Mechanics, fluids, heat and thermodynamics, vibrations, waves, sound.

**STAT 1010. Principles of Statistics.** (3-2) Cr. 4.0. F.S.S.S. Prereq: 1½ years of high school algebra
Statistical concepts in modern society; descriptive statistics and graphical displays of data; the normal distribution; data collection (sampling and designing experiments); elementary probability; elements of statistical inference; estimation and hypothesis testing; linear regression and correlation; contingency tables. Credit for only one of the following courses may be applied toward graduation: STAT 101, 104, 105, 226.

**STAT 1040. Introduction to Statistics.** (2-2) Cr. 3.0. F.S.S.S.
Prereq: 1½ years of high school algebra
Statistical concepts and their use in science; collecting, organizing and drawing conclusions from data; elementary probability; binomial and normal distributions; regression; estimation and hypothesis testing. For students in the agricultural and biological sciences. Credit for only one of the following courses may be applied toward graduation: STAT 1010, 1040, 1050, 2260.

Students who intend to apply to the Architecture program are advised to take MATH 1450 and PHYS 1310 & 1310L during their Core year.

Students who intend to apply to the Landscape Architecture program are encouraged take MATH 1400 during their Core year.

Students who intend to apply to the Industrial Design program are advised to take PHYS 1010 or PHYS 1310 & 1310L, and a math course.
Recommended Courses

Humanities: Introduces students to cultural heritage & history

**AFAM 2010. Introduction to African American Studies**. (3-0) Cr. 3.0. F.S.
An interdiscipilinary introduction to the study of African American culture. Includes history, the social sciences, literature, religion, and the arts, as well as conceptual frameworks for investigation and analysis of the African American experience.

**AMIN 2100. Introduction to American Indian Studies**. (3-0) Cr. 3.0. F.S.SS.
Introduction to the multidisciplinary aspects of American Indian studies. Topics include literature, the arts, history, anthropology, sociology, education, and contemporary Indian politics. Guest lectures, media presentations, and discussion of assigned readings.

**AMIN 2250. American Indians of Iowa**. (Cross-listed with ANTHR). (3-0) Cr. 3.0. F.
Cultures and histories of Native people who have called the present state of Iowa home; primary focus on the period between 1700 CE and the present; Native interactions with Spanish, French, British, and American people.

**CLST 2730. Greek and Roman Mythology**. (3-0) Cr. 3.0. F.S.S.
Survey of the legends, myths of the classical world with emphasis on the principal gods, and heroes, and their relation to ancient social, psychological, and religious practices; some attention may be given to important modern theories. Meets International Perspectives Requirement. H. Honors (4-0) Cr. 4.

**DANCE 2700. Dance Appreciation**. (3-0) Cr. 3.0. F.
Introduction to the many forms and functions of dance in world cultures. Develop abilities to distinguish and analyze various dance styles. No dance experience required. Meets International Perspectives Requirement.

**ENGL 2010. Introduction to Literature**. (3-0) Cr. 3.0. Prereq: Credit in or exemption from 150
Study of selected examples of drama, poetry, short fiction, and the novel drawn from both British and American literature. Recommended for non-majors.

**ENGL 2400. Introduction to American Indian Literature**. (Cross-listed with AM IN). (3-0) Cr. 3.0. F.
Prereq: Credit in or exemption from ENGL 150
Appreciation of oral and written forms of American Indian literatures. Tropes and techniques in oral, visual and written texts. Focus on the role of American Indians in interdisciplinary approaches to modern social and environmental issues as expressed in literary works.

Humanities (continued)

**HIST 2100. Introduction to Western Civilization I**. (3-0) Cr. 3.0. F.
Western civilization from ancient Mediterranean world to 1500. Social and cultural developments; economic and political ideas and institutions; problems of historical change and continuity. Meets International Perspectives Requirement.

**HIST 2210. Survey of United States History I**. (3-0) Cr. 3.0. F.
Colonial foundations: revolution, confederation, and constitution; nationalism and democracy; sectional disunity, Civil War, and reunion.

**MUSIC 1020. Introduction to Music Listening**. (3-0) Cr. 3.0. F.S.SS.
Expansion of the music listening experiences for the general student through greater awareness of differences in techniques of listening, performance media, and materials of the art. The course focuses on the elements of music: rhythm, melody, harmony, form, and style, and how these elements are used in musics of different cultures and time periods. Ability to read or perform music not required. Meets International Perspectives Requirement.

**PHIL 2010. Introduction to Philosophy**. (3-0) Cr. 3.0. F.S.SS.
It has been rumored that the unexamined life is not worth living. Philosophy is an attempt to begin examining life by considering such questions as: What makes us human? What is the world ultimately like? How should we relate to other people? Is there a God? How can we know anything about these questions? Understanding questions of this kind and proposed answers to them is what this course is all about.

**PHIL 2060. Introduction to Logic and Scientific Reasoning**. (3-0) Cr. 3.0. F.S.SS.
Basic principles of critical reasoning and argument evaluation. A consideration of basic forms of argumentation in science and everyday life. Application to contemporary issues and controversies.
PHIL 2300. Moral Theory and Practice. (3-0) Cr. 3.0. F.S.SS.
Investigation of moral issues in the context of major ethical theories of value and obligation; e.g., punishment, abortion, economic justice, job discrimination, world hunger, and sexual morality. Emphasis on critical reasoning and argument analysis.

RELG 2050. Introduction to World Religions. (3-0) Cr. 3.0. F.S.SS.
An introduction to the academic study of religions, including myths, beliefs, rituals, values, social norms. Examples chosen from oral cultures and major religions of the world. Meets International Perspectives Requirement.

RELG 2100. Religion in America. (3-0) Cr. 3.0. F.S.SS.
Introductory study of the major beliefs, practices, and institutions of American Judaism, Catholicism, Protestantism, and Islam with emphasis on the diversity of religion in America, and attention to issues of gender, race, and class. Meets International Perspectives Requirement.

THTRE 1060. Introduction to the Performing Arts. (3-0) Cr. 3.0. F.S.SS.
An audience-oriented, broadbased, team-taught survey of the performing arts which emphasizes theatre and includes segments on television, radio, film, dance, and music.

PHIL 2300. Moral Theory and Practice. (3-0) Cr. 3.0. F.S.SS.
Investigation of moral issues in the context of major ethical theories of value and obligation; e.g., punishment, abortion, economic justice, job discrimination, world hunger, and sexual morality. Emphasis on critical reasoning and argument analysis.

RELG 2050. Introduction to World Religions. (3-0) Cr. 3.0. F.S.SS.
An introduction to the academic study of religions, including myths, beliefs, rituals, values, social norms. Examples chosen from oral cultures and major religions of the world. Meets International Perspectives Requirement.

RELG 2100. Religion in America. (3-0) Cr. 3.0. F.S.SS.
Introductory study of the major beliefs, practices, and institutions of American Judaism, Catholicism, Protestantism, and Islam with emphasis on the diversity of religion in America, and attention to issues of gender, race, and class. Meets International Perspectives Requirement.

THTRE 1060. Introduction to the Performing Arts. (3-0) Cr. 3.0. F.S.SS.
An audience-oriented, broadbased, team-taught survey of the performing arts which emphasizes theatre and includes segments on television, radio, film, dance, and music.

THTRE 1100. Theatre and Society. (3-0) Cr. 3.0. F.S.
An introduction to theatre focusing on its relationship with society throughout history.

USLS 2110. Introduction to U.S. Latino/a Studies. (3-0) Cr. 3.0. F.S.
History and current lives of the Latino/a peoples in the United States, including Mexican, Cuban, Puerto Rican, Dominican, and South and Central Americans, as well as information specific to Iowa Latino/as, will be covered. Through readings, class discussions, writing assignments, and guest speakers, students will acquire accurate information and a solid understanding of the US Latino/a population and cultural perspectives. Elements of Latino/a culture to be covered include historical, sociological, educational, psychological, economic, and political facets.

WGS 2010. Introduction to Women’s Studies. (3-0) Cr. 3.0.
Introduction to the interdisciplinary field of women’s studies. Contemporary status of women in the U.S. and worldwide from social, economic, historical, political, philosophical and literary perspectives. Analysis of intersection of gender, race, class, and sexuality. Subject matter includes work, health, sexuality, and violence. Foundation for the other courses in the program.

World Language and Cultures
Languages include: Arabic, Chinese, French, German, Greek, Latin, Portuguese, Russian and Spanish. Talk to your adviser about placement.
Recommended Courses

**Social Sciences:** Introduces students to human behavior & the structure & functioning of institutions

**ADVRT 2300. Advertising Principles.** (3-0) Cr. 3.0. F.S.
Historical, social, economic and legal aspects of advertising. Evaluations of advertising research, media, strategy and appeals. Study of the creation of advertising.

**AMD 1650. Dress, Appearance, and Diversity in Society.** (3-0) Cr. 3.0. F.S.
Examination of diversity among consumers and introduction to forecasting trends in dress. Introduction to social justice issues.

**ANTHR 2010. Introduction to Cultural Anthropology.** (3-0) Cr. 3.0. F.S.SS.
Comparative study of culture as key to understanding human behaviors in different societies. Using a global, cross-cultural perspective, patterns of family life, economic and political activities, religious beliefs, and the ways in which cultures change are examined. Meets International Perspectives Requirement.

**ANTHR 2300. Globalization and the Human Condition.** (3-0) Cr. 3.0. F.S.
An introduction to understanding key global issues in the contemporary world. Focuses on social relations, cultural practices and political-economic linkages among Africa, the Americas, Asia, Europe and the Pacific. Meets International Perspectives Requirement.

**COMST 1010. Introduction to Communication Studies.** (3-0) Cr. 3.0. F.S.
An introduction to communication theory, the development and functions of communication, and a survey of verbal, nonverbal, interpersonal, small group, organizational, and intercultural communication. Particular emphasis given to using communication to manage interpersonal relationships.

**COMST 2110. Interpersonal Communication.** (3-0) Cr. 3.0. F.S.
Application of communication principles, theory, and research to the process of interpersonal communication; includes verbal and nonverbal communication, listening, and conflict management. Particular emphasis given to using communication to manage interpersonal relationships.

**ECON 1010. Principles of Microeconomics.** (3-0) Cr. 3.0. Prereq: 101 recommended

**ECON 1020. Principles of Macroeconomics.** (3-0) Cr. 3.0. Prereq: 101 recommended

**HDFS 1020. Individual and Family Life Development.** (3-0) Cr. 3.0. F.S.SS.
Development of individuals, families, and their reciprocal relationships as affected by external factors; examined within a framework of lifespan developmental tasks.

**HDFS 2390. Housing and Consumer Issues.** (3-0) Cr. 3.0. F.S.
Introduction to factors affecting consumer and housing decisions of individuals and families, including housing issues such as housing quality, accessibility and affordability, neighborhood/housing contexts for families; and consumer issues such as consumer protection, legislation and regulation, and consumer fraud.

**HDFS 2760. Human Sexuality.** (3-0) Cr. 3.0. F.S.SS.
Behavioral, biological, and psychological aspects of human sexuality within the social context of family, culture, and society. Role of sexuality in human development. Critical analysis of media and research. Communication and decision-making skills relating to sexuality issues and relationships.

**JLMC 1010. Mass Media and Society.** (3-0) Cr. 3.0. F.S.SS.
Introduction to communication theory and research; organization, characteristics and responsibilities of the mass media; media literacy process.

**JLMC 1020. Introduction to International Politics.** (3-0) Cr. 3.0. F.S.
Dynamics of interstate relations pertaining to nationalism, the nation state; peace and war; foreign policy making; the national interest; military capability and strategy; case studies of transnational issues, such as population, food, energy, and terrorism. Meets International Perspectives Requirement.

**POLS 1110. Introduction to American Government.** (3-0) Cr. 3.0. F.S.SS.
Fundamentals of American democracy; constitutionalism; federalism; rights and duties of citizens; executive, legislative, and judicial branches of government; elections, public opinion, interest groups, and political parties.

**POLS 1210. Introduction to International Politics.** (3-0) Cr. 3.0. F.S.
Dynamics of interstate relations pertaining to nationalism, the nation state; peace and war; foreign policy making; the national interest; military capability and strategy; case studies of transnational issues, such as population, food, energy, and terrorism. Meets International Perspectives Requirement.

**POLS 1250. Democracy and Dictatorship: Introduction to Comparative Politics.** (3-0) Cr. 3.0. F.S.
Introduction to political controversy surrounding political issues such as violence, deception, corruption, civil disobedience, democracy, justice, equality, and freedom. Students will read classic and contemporary texts and consider political applications.
Recommended Courses

Social Sciences (continued)

POLS 2510. Introduction to International Politics. (3-0) Cr. 3.0. F.S.
Dynamics of interstate relations pertaining to nationalism, the nation state; peace and war; foreign policy making; the national interest; military capability and strategy; case studies of transnational issues, such as population, food, energy, and terrorism. Meets International Perspectives Requirement.

PR 2200. Principles of Public Relations. (3-0) Cr. 3.0. F.S.
Introduction to public relations in business, government and non-profit organizations; functions, processes, and management; ethics, public opinion and theory.

PSYCH 1010. Introduction to Psychology. (3-0) Cr. 3.0. F.S.SS.
Fundamental psychological concepts derived from the application of the scientific method to the study of behavior and mental processes. Applications of psychology. H. Honors section. (2-2) Fall. (Honors program students only)

PSYCH 2300. Developmental Psychology. (3-0) Cr. 3.0. F.S.SS.
Life-span development of physical traits, cognition, intelligence, language, social and emotional behavior, personality, and adjustment.

PSYCH 2800. Social Psychology. (3-0) Cr. 3.0. F.S.SS.
Individual human behavior in social contexts. Emphasis on social judgments and decisions, attitudes, perceptions of others, social influence, aggression, stereotypes, and helping.

SOC 1340. Introduction to Sociology. (3-0) Cr. 3.0. F.S.SS.
Social interaction and group behavior with emphasis on the scientific study of contemporary U.S. society, including issues relating to socialization, inequality, and changing rural and urban communities. Analysis of relationships among the institutions of family, religion, political participation, work, and leisure. Credit for only SOC 130 or 134 may be applied toward graduation. H. Honors.

SOC 2200. Globalization and Sustainability. (Cross-listed with ANTHR, ENV S, GLOBE, M E, MAT E). (3-0) Cr. 3.0. F.S.
An introduction to understanding the key global issues in sustainability. Focuses on interconnected roles of energy, materials, human resources, economics, and technology in building and maintaining sustainable systems. Applications discussed will include challenges in both the developed and developing world and will examine the role of technology in a resource-constrained world. Cannot be used for technical elective credit in any engineering department. Meets International Perspectives Requirement.

SPCM 1100. Listening. (3-0) Cr. 3.0. F.S.
Theory, principles, and competency development in comprehensive, therapeutic, critical, consumer, and appreciative listening. The impact of listening in relationships and partnerships.