241B Creative Arts and Humanities: Philosophy in Literature
Spring. 4(4-0) P: (IAH 201 or IAH 202 or IAH 203 or IAH 204 or IAH 206 or IAH 207 or IAH 208)
Philosophy and literature, relationships to each other and to societies in which they were produced. Themes such as the meaning of life, God and the problem of evil, and the nature of knowledge. Authors such as Voltaire, Dostoevsky, Wright, and Atwood examined from a variety of perspectives.

241C Creative Arts and Humanities: Cultural and Artistic Traditions of Europe
Fall, Spring. 4(4-0) P: (IAH 201 or IAH 202 or IAH 203 or IAH 204 or IAH 206 or IAH 207 or IAH 208)
European artistic and cultural movements and styles, introduced through works of art, music, literature, philosophy and religion. Presented in historical context. Specific eras and works variable by term.

241D Creative Arts and Humanities: Theater and Society in the West
Spring. 4(4-0) P: (IAH 201 or IAH 202 or IAH 203 or IAH 204 or IAH 206 or IAH 207 or IAH 208)
Artistic creativity seen through the prism of theater. Presented in historical context. Influences from art, literature, music, and religion. Focus on translation of social visions into dramatic art. Plays and themes variable by term.

241E Creative Arts and Humanities: The Creative Process
Spring of even years. 4(4-0) P: (IAH 201 or IAH 202 or IAH 203 or IAH 204 or IAH 206 or IAH 207 or IAH 208)
Philosophical, religious and historical foundations for understanding the process of creation in visual arts, theatre, music and literature. Variations across eras and societies.

241F Creative Arts and Humanities: Traditions in World Art (I)
Fall. 4(4-0) P: (IAH 201 or IAH 202 or IAH 203 or IAH 204 or IAH 206 or IAH 207 or IAH 208)
Aesthetic qualities of painting, sculpture and architecture within historical contexts across major civilizations. Visual forms in relation to belief systems and musical and literary traditions.

INTEGRATIVE STUDIES IN BIOLOGICAL SCIENCE ISB

Center for Integrative Studies in General Science
College of Natural Science

200 History of Life
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or concurrently or MTH 110 or concurrently or MTH 116 or concurrently or LBS 117 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement test.
Life from its origin to the dawn of human history. Living things as both the products of evolutionary processes and as a major force driving evolution and altering the environment of planet earth.

202 Applications of Environmental and Organismal Biology
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or concurrently or MTH 110 or concurrently or MTH 116 or concurrently or LBS 117 or concurrently or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement test.
Historical and recent development of ideas about behavior, ecological, and evolutionary processes. Critical evaluation of the use and misuse of human understanding of nature, emphasizing recent findings.

204 Applications of Biomedical Sciences
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or concurrently or MTH 110 or concurrently or MTH 116 or concurrently or LBS 117 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement test.
Historical and recent development of knowledge about cellular developmental or genetic processes. Critical evaluation of the use and misuse of scientific discoveries in these areas.

206H Human Biology and Society
Fall, Spring. 3(3-0) P: (MTH 103 or concurrently or MTH 110 or concurrently or MTH 116 or concurrently or LBS 117 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement test.
Conceptual and technological advances in biology. Ethical, legal, social and economic issues which accompany these advances.

208L Applications in Biological Science Laboratory
Fall, Spring, Summer. 2(1-2) P: (ISB 202 or concurrently or ISB 204 or concurrently) SA: ISB 202L, ISB 204L
Problem solving activities based on observation and interpretation of selected biological systems.

INTEGRATIVE STUDIES IN PHYSICAL SCIENCE ISP

Center for Integrative Studies in General Science
College of Natural Science

203 Geology of the Human Environment
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement test.
The scientific method in geological studies: its impact on the human environment and history, and on cultural, social, philosophical, and political decisions.

203L Geology of the Human Environment Laboratory
Fall, Spring, Summer. 2(1-2) P: (ISP 203 or concurrently)
Exercises in the scientific method applied to earth materials and their impact on society.

205 Visions of the Universe
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement.
Role of observation, theory, philosophy, and technology in the development of the modern conception of the universe. The Copernican Revolution. Birth and death of stars. Spaceship Earth. Cosmology and time.

205L Visions of the Universe Laboratory
Fall, Spring, Summer. 2(1-2) P: (ISP 205 or concurrently)
Observations of the sky, laboratory experiments, and computer simulations exploring the development of the modern conception of the universe.

207 World of Chemistry
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement test.
The language, concepts, models and techniques of chemical science, including atomic theory; nuclear energy; acids; chemicals in air, water, food and biological systems.

207L World of Chemistry Laboratory
Fall, Spring, Summer. 2(1-2) P: (ISP 207 or concurrently)
Chemical combinations and reactivity with respect to such materials as acids, bases, dyes, foods, and detergents.

209 The Mystery of the Physical World
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently)or designated score on Mathematics placement test.
Laws of physics through demonstrations and analyses of every day phenomena. Optics, mechanical systems and electromagnetic phenomena.

209L The Mystery of the Physical World Laboratory
Fall, Spring, Summer. 2(1-2) P: (ISP 209 or concurrently)
Physical phenomena: optics, mechanical systems and electromagnetics.

213H Navigating the Universe
Fall. 3(3-0) Interdepartmental with Physics. P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) or designated score on Mathematics placement test. RB: High school physics, high school algebra, and high school trigonometry
Philosophical and biographical history of physics. Comparing physics of fields, relativity, quantum mechanics, elementary particle physics, and cosmology to art as an alternate way of understanding and representing the world.

215 The Science of Sound
Fall, Spring. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201) or designated score on Mathematics placement test.
The science of speech, communication, musical instruments, room acoustics, and analogue and digital audio. Integrating the physical, physiological, and psychological principles involved.

217 Water and the Environment
Fall, Spring. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently)
Application of the scientific method to identification and solution of environmental problems related to water.

217L Water and the Environment Lab
Fall, Spring. 2(1-2) P: (ISP 217 or concurrently)
Application of the scientific method to identification and solution of environmental problems related to water.

221 Earth Systems: Energy
Fall, Spring, Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or LBS 117 or MTH 106 or concurrently or MTH 124 or concurrently or MTH 132 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently)
Flow of energy into, through, and out of the earth's lithosphere, hydrosphere, atmosphere, and biosphere. Energy, entropy, and life processes. Global warming, greenhouse effect, and contemporary issues.

INTEGRATIVE STUDIES IN SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES ISS

Center for Integrative Studies in Social, Behavioral and Economic Science
College of Social Science

210 Society and the Individual (D)
Fall, Spring, Summer. 4(4-0)
Evolution of human behavior with an emphasis on the individual and society. Family and kinship, social organizations. Societal types, personality, and the life cycle.

215 Social Differentiation and Inequality (D)
Fall, Spring, Summer. 4(4-0)
Types, causes and consequences of stratification in human societies. Age, class, gender, race and other factors which define social position. Education, occupation, political economy.

220 Time, Space and Change in Human Society (D)
Fall, Spring, Summer. 4(4-0)
Evolutionary, ecological, and spatial theories of adaptation and change. Cultural evolution from prehistoric foraging to the post-industrial age. Continuity and change in the emergence and development of contemporary ways of life.

225 Power, Authority, and Exchange (D)
Fall, Spring, Summer. 4(4-0)
Power, authority, and exchange in organizing societies. Costs and limitations of power. Institutionalization of authority. Systems of exchange: planned vs. market economies.

310 People and Environment (I)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Contemporary issues related to the interaction of socio-cultural and ecological systems. Global, regional, national and local environmental problems and responses.

315 Global Diversity and Interdependence (I)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Contemporary issues in global political economy. Social forces and competing ideologies in a world context. Global resource distribution and development strategies. National identities and transnational linkages. First and Third World dichotomies.

320 World Urban Systems (I)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Patterns of urbanization in various areas of the world over time. Linkage within and between urban centers. Economic, political and social/behavioral accommodation and adaptation to urban growth and change.

325 War and Revolution (I)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Social conflict, wars and revolutions. Patterns of individual and collective action. Violence and conflict resolution.

330A Africa: Social Science Perspectives (I)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Comparative study of geography, cultures, politics, and economies of Africa. Diversity and change.

330B Asia: Social Science Perspectives (I)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Comparative study of geography, cultures, politics, and economies of Asia. Diversity and change.

330C Latin America: Social Science Perspectives (I)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Comparative study of geography, cultures, politics, and economies of Latin America. Diversity and change.

335 National Diversity and Change: United States (N)
Fall, Spring, Summer. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225) SA: ISS 335A
Racial, ethnic, class, gender, and other forms of diversity in the United States. Systems of dominant-minority relations and forms of prejudice and discrimination. Scope of and responses to group inequalities.

336 Canada: Social Science Perspectives (I)
Spring. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225) SA: ISS 335B
Canadian political, economic, and social institutions. Ethnic and other forms of diversity in Canada. North American national comparisons.

INTERNAL MEDICINE IM

Department of Internal Medicine
College of Osteopathic Medicine

400 Introduction to Emergency Medicine Research
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P: Completion of Tier I writing requirement. RB: Pre-professional health science. R: Approval of department.
Research experience in data collection, data entry, statistical analysis and manuscript preparation. Opportunity for work with an emergency medicine resident and faculty member on a single research project.

401 Clinical Emergency Medicine Research
Fall, Spring. 4(2-4) A student may earn a maximum of 8 credits in all enrollments for this course. RB: Pre-professional health science. R: Open only to juniors or seniors. Approval of department.
Research experience in data collection, data entry, and statistical analysis at an off-campus hospital involving multiple projects.

590 Special Problems in Internal Medicine
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 48 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine. Approval of department.
Students work under faculty direction on an experimental, theoretical, or applied problem.