

221B. Great Ages: The European Renaissance

Fall of odd years. 4(4-0) P: (IAH 201)
Arts and humanities of Renaissance Europe: literature, visual arts, music, religion and philosophy presented in historical context. Selected themes, variable by term.

221C. Great Ages: The Modern World (I)

Fall, Spring. 4(4-0) P: (IAH 201)
Arts and humanities of the modern world, examined through the frame of urban and intellectual life. Literature, visual arts, music, religion and philosophy presented in historical context. Selected regions and themes. Variable by term.

231A. Themes and Issues: Human Values and the Arts and Humanities

Fall, Spring. 4(4-0) P: (IAH 201)
Values of individualism, responsibility, love, community, and rationality. Students are introduced to diverse methods and materials from the arts and humanities.

231B. Themes and Issues: Moral Issues and the Arts and Humanities

Fall, Spring. 4(4-0) P: (IAH 201)
Human conflict and moral dilemmas, addressed through diverse methods and materials from the arts and humanities.

231C. Themes and Issues: Roles of Language in Society (D)

Fall, Spring. 4(4-0) P: (IAH 201)
Language as the medium of culture in various societies. Power and social identity as manifested through language. Students are introduced to diverse methods and materials from the arts and humanities.

241A. Creative Arts and Humanities: Music and Society in the Modern World (D)

Fall of even years. 4(4-0) P: (IAH 201)
The arts and humanities of the modern world through the prism of music. Music traditions and methodologies in their historic context. Relationship of music creativity to societies in which it has been produced.

241B. Creative Arts and Humanities: Philosophy in Literature

Spring. 4(4-0) P: (IAH 201)
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)
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)
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)
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)
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 MTH 110 or MTH 116 or MTH 120 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 MTH 110 or MTH 116 or MTH 120 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.

202L. Applications of Environmental and Organismal Biology Laboratory
Fall, Spring, Summer. 1(0-2) C: ISB 202 concurrently.

Problem solving activities based on observation and the analysis of empirically derived data from environmental and organismal biology.

204. Applications of Biomedical Sciences
Fall, Spring, Summer. 3(3-0) P: MTH 103 or MTH 110 or MTH 116 or MTH 120 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.

204L. Applications of Biomedical Science Laboratory

Fall, Spring, Summer. 1(0-2) C: ISB 204 concurrently.
Problem solving activities based on observation and interpretation of selected biological systems in relation to medical science.

206H. Human Biology and Society
Fall, Spring. 3(3-0) P: MTH 103 or MTH 110 or MTH 116 or MTH 120 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.

**INTEGRATIVE STUDIES
IN PHYSICAL SCIENCE** **ISP**

**Center for Integrative Studies
in General Science
College of Natural Science**

201. Concepts of Reality through Physical Science
Fall, Spring, Summer. 3(3-0) P: MTH 110 or MTH 116 or MTH 120 or MTH 124 or MTH 201 or STT 200 or STT 201 or concurrently or designated score on mathematics placement test.

Historical and recent development of our understanding of the physical world. Selected topics from the physical sciences, their relationship to one another and to other areas of culture.

201L. Concepts of Reality through Physical Science Laboratory
Fall, Spring, Summer. 1(0-2) C: ISP 201 concurrently.
Problem solving activities based on observation and interpretation of selected physical systems.

203. Geology of the Human Environment
Fall, Spring, Summer. 3(3-0) P: MTH 110 or MTH 116 or MTH 120 or MTH 124 or MTH 201 or STT 200 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. 1(0-2) C: ISP 203 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 104 or MTH 110 or MTH 116 or MTH 120 or MTH 124 or MTH 201 or STT 200 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.

**Descriptions—Integrative Studies in Physical Science
of
Courses**

**205L. Visions of the Universe
Laboratory**

Fall, Spring, Summer. 1(0-2) C: ISP 205 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 110 or MTH 116 or MTH 120 or MTH 124 or MTH 201 or STT 200 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. 1(0-2) C: ISP 207 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 110 or MTH 116 or MTH 120 or MTH 124 or MTH 201 or STT 200 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. 1(0-2) C: ISP 209 concurrently.

Physical phenomena: optics, mechanical systems and electromagnetics.

211. Guide to the Atom

Fall, Spring, Summer. 3(3-0) P: MTH 110 or MTH 116 or MTH 120 or MTH 124 or MTH 201 or STT 200 or STT 201 or concurrently or designated score on mathematics placement test.

Historical and recent development of knowledge about and models of the fundamental structures of all matter. Physical laws governing the structure of matter.

215. The Science of Sound

Fall, Spring. 3(3-0) P: (MTH 104 or concurrently or MTH 110 or concurrently or MTH 116 or concurrently or MTH 120 or concurrently or MTH 124 or concurrently or MTH 201 or concurrently or STT 200 or concurrently or STT 201 or concurrently) Designated score on Mathematics placement test. Not open to students with credit in TCC 321.

The science behind sound. Speech, communication, musical instruments, room acoustics, and analogue and digital audio. Integrating the physical, physiological, and psychological principles involved.

**INTEGRATIVE STUDIES
IN SOCIAL, BEHAVIORAL
AND ECONOMIC
SCIENCES**

ISS

**Center for Integrative Studies
in Social 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)

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.

SA: ISS 335A

**336. Canada: Social Science
Perspectives (I)**

Spring. 4(4-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)

Canadian political, economic, and social institutions. Ethnic and other forms of diversity in Canada. North American national comparisons.

SA: ISS 335B

INTERNAL MEDICINE IM

**Department of Internal Medicine
College of Osteopathic Medicine**

**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.