#### 202 Europe and the World (I)

Fall, Spring, Summer. 4(4-0) P:M: Completion of Tier I writing requirement. RB: Designated score on English placement test. R: Open only to undergraduate students. Concurrent registration in AL 201 (Writing Tutorial) is required for students receiving 1.0 or 1.5 in Tier I course. Not open to students with credit in IAH 201 or IAH 206.

Cultural encounters and political relationships between Europeans and people(s) from other regions of the world since 1500 as shown through study of written texts, literature, the visual arts, music, and other forms of expression. Examples from Europe and several continents.

#### 206 Self, Society, and Technology (D)

Fall, Spring. 4(4-0) P:M: Completion of Tier I writing requirement. RB: Designated score on English placement test. R: Open only to undergraduate students. Concurrent registration in AL 201 (Writing Tutorial) is required for students receiving 1.0 or 1.5 in Tier I course. Not open to students with credit in IAH 201 or IAH 202.

Exploration of how technology affects and is affected by our conceptions of ourselves, relations with others, and our ideals. Approaches and materials from philosophy, literature, art, music, and history as well as the natural sciences.

## 211A Area Studies and Multicultural Civilizations: Africa (I)

Spring. 4(4-0) P:M: (IAH 201 or IAH 202 or IAH 206)

Arts and humanities of Africa: literature, art, music, religion and philosophy presented in historical context. Selected regions, cultures, and themes. Variable by term.

## 211B Area Studies and Multicultural Civilizations: Asia (I)

Fall, Spring. 4(4-0) P:M: (IAH 201 or IAH 202 or IAH 206)

Arts and humanities of Asia: literature, visual arts, music, religion and philosophy presented in historical context. Selected regions, cultures, and themes. Variable by term.

# 211C Area Studies and Multicultural Civilizations: The Americas (D)

Fall, Spring. 4(4-0) P:M: (IAH 201 or IAH 202 or IAH 206)

Arts and humanities of the Americas: literature, visual arts, music, religion and philosophy presented in historical context. Selected regions, cultures, and themes. Variable by term.

## 211D Area Studies and Multicultural Civilizations: The Middle East (I)

Fall. 4(4-0) P:M: (IAH 201 or IAH 202 or IAH 206)

Arts and humanities of the Middle East: literature, visual arts, music, religion and philosophy presented in historical context. Themes variable by term.

#### 221A Great Ages: The Ancient World (I)

Fall, Spring. 4(4-0) P:M: (IAH 201 or IAH 202 or IAH 206)

Arts and humanities of the ancient 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.

#### 221B Great Ages: The European Renaissance Fall of odd years. 4(4-0) P:M: (IAH 201 or

Fall of odd years. 4(4-0) P:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (IAH 201 or IAH 202 or IAH 206)

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:M: (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 201 or matter that the concurrently or STT 200 or concurrently or STT 201 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:M: (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 201 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:M: (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.

### **Human Biology and Society**

Fall, Spring. 3(3-0) P:M: (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.

#### **Applications in Biological Science** Laboratory

Fall, Spring, Summer. 2(1-2) P:M: (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

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

#### Concepts of Reality through Physical 201 Science

Fall, Spring, Summer. 3(3-0) P:M: (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.

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.

#### Concepts of Reality through Physical Science Laboratory

Fall, Spring, Summer. 2(1-2) P:M: (ISP 201 or 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:M: (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.

#### **Geology of the Human Environment** Laboratory

Fall, Spring, Summer. 2(1-2) P:M: (ISP 203 or concurrently)

Exercises in the scientific method applied to earth materials and their impact on society.

#### Visions of the Universe

Fall, Spring, Summer. 3(3-0) P:M: (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 placem

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:M: (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

**ISP** 

Fall, Spring, Summer. 3(3-0) P:M: (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:M: (ISP 207 or concurrently)

Chemical combinations and reactivity with respect to such materials as acids, bases, dyes, foods, and detergents.

#### The Mystery of the Physical World

Fall, Spring, Summer. 3(3-0) P:M: (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:M: (ISP 209 or concurrently)

Physical phenomena: optics, mechanical systems and electromagnetics.

#### **Navigating the Universe**

Fall. 3(3-0) Interdepartmental with Physics. P:M: (MTH 103 or MTH 110 or MTH 116 or MTH 106 or MTH 124 or MTH 132 or MTH 201 or LBS 117 or STT 200 or STT 201) or designated score on Mathematics placement test. RB: High school physics, high school algebra, and high school trigonome-

Aspects of classical physics, relativity, quantum mechanics, and standard models of elementary particle physics and cosmology. How notions of reality and standards for forming acceptable knowledge claims have changed.

#### The Science of Sound

Fall, Spring. 3(3-0) P:M: (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.

#### Earth Systems: Water and the Biosphere Fall, Spring. 3(3-0) P:M: (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 the identification and solution of environmental problems related to water and aquatic ecosystems.

#### **Energy and the Biosphere**

Fall, Spring, Summer. 3(3-0) P:M: (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 biosphere. Energy, entropy, and life processes. Ecology and the structure of life. Global warming, Greenhouse Effect, and contemporary issues

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

#### **Center for Integrative Studies** in Social. Behavioral and **Economic Science** College of Social Science

## 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