

INTEGRATIVE STUDIES IN 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-numbered 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 ex

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-numbered 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.

241H*. *Creative Arts and Humanities: Artistic Capital Cities*
 Spring of odd-numbered years. 4(4-0)
 P: IAH 201.
 Artistic and humanistic creativity through the prism of artistic capital cities, such as Vienna or London, where the arts and humanities interacted. Visual arts, music, theater and humanities in historical context. City variable by term.

INTEGRATIVE STUDIES IN BIOLOGICAL SCIENCE ISB

200. *History of Life*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of the University mathematics requirement.
 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.
 QP: MTH 109 ORMTH 111 QA: ICS 101 NS 125 NS 1824

202. *Applications of Environmental and Organismal Biology*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of the University mathematics requirement.
 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.
 QP: MTH 109 ORMTH 111 QA: ICS 121 NS 142

202L. *Applications of Environmental and Organismal Biology Laboratory*
 Fall, Spring, Summer. 1(0-2)
 C: ISB 202
 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: Completion of University mathematics requirement.
 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.
 QP: MTH 109 ORMTH 111 QA: ICS 120

204L. *Applications of Biomedical Science Laboratory*
 Fall, Spring, Summer. 1(0-2)
 C: ISB 204
 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: Completion of University mathematics requirement.
 Conceptual and technological advances in biology. Ethical, legal, social and economic issues which accompany these advances.
 QP: MTH 109 ORMTH 111

INTEGRATIVE STUDIES IN PHYSICAL SCIENCE ISP

201. *Concepts of Reality through Physical Science*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of University mathematics requirement.
 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.
 QP: MTH 109 ORMTH 111 QA: NS 135 NS 155 NS 152

201L. *Concepts of Reality through Physical Science Laboratory*
 Fall, Spring, Summer. 1(0-2)
 C: ISP 201
 Problem solving activities based on observation and interpretation of selected physical systems.
 QA: NS 135 NS 155

203. *Geology of the Human Environment*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of University mathematics requirement.
 The scientific method in geological studies: its impact on the human environment and history, and on cultural, social, philosophical, and political decisions.
 QP: MTH 109 ORMTH 111 QA: GLG 200 GLG 201 GLG 306

203L. *Geology of the Human Environment Laboratory*
 Fall, Spring, Summer. 1(0-2)
 C: ISP 203
 Exercises in the scientific method applied to earth materials and their impact on society.
 QA: GLG 200 GLG 201 GLG 306

205. *Visions of the Universe*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of University mathematics requirement.
 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.
 QP: MTH 109 ORMTH 111 QA: AST 119 AST 217 AST 229 NS 135 NS 155

205L. *Visions of the Universe Laboratory*
 Fall, Spring, Summer. 1(0-2)
 C: ISP 205
 Observations of the sky, laboratory experiments, and computer simulations exploring the development of the modern conception of the universe.
 QA: AST 119 AST 217

207. *World of Chemistry*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of University mathematics requirement.
 The language, concepts, models and techniques of chemical science, including atomic theory; nuclear energy; acids; chemicals in air, water, food and biological systems.
 QP: MTH 109 ORMTH 111

207L. *World of Chemistry Laboratory*
 Fall, Spring, Summer. 1(0-2)
 C: ISP 207
 Chemical combinations and reactivity with respect to such materials as acids, bases, dyes, foods, and detergents.

209. *Physics of the World Around Us*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of University mathematics requirement.
 Laws of physics through demonstrations and analyses of every day phenomena. Optics, mechanical systems and electromagnetic phenomena.
 QP: MTH 109 ORMTH 111

209L. *Physics of the World Around Us Laboratory*
 Fall, Spring, Summer. 1(0-2)
 C: ISP 209
 Physical phenomena: optics, mechanical systems and electromagnetics.

211. *The Structure of Matter*
 Fall, Spring, Summer. 3(3-0)
 P: Completion of University mathematics requirement.
 Historical and recent development of knowledge about and models of the fundamental structures of all matter. Physical laws governing the structure of matter.
 QP: MTH 109 ORMTH 111 QA: PHY 205