Courses are subject to revision and final approval.

HUMAN NUTRITION AND FOODS

891. Nutrition Seminar
Spring, 1-10 credits. May enroll for a maximum of 10 credits. Prerequisite: HNF 890. Open only to graduate students. Graduates of the Master's Thesis Research course are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

894. Nutrition Practicum
Fall, Spring, Summer. 1-6 credits. May enroll for a maximum of 6 credits. Prerequisite: HNF 450. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department. (QA: HNF 894)

901. Nutrition: Metabolism and Function of Vitamins
Spring, 3-3 credits. Open only to students in Nutrition. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 898)

911. Nutrition: Metabolism and Function of Vitamins
Spring, 3-3 credits. Open only to students in Nutrition. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 898)

918. Nutrition: Metabolism and Function of Vitamins
Spring, 3-3 credits. Open only to students in Nutrition. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 898)

935. Nutrition: Metabolism and Function of Vitamins
Spring, 3-3 credits. Open only to students in Nutrition. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 898)

INTEGRATIVE STUDIES IN ARTS AND HUMANITIES

IAB

201. United States and the World (D)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

211. Area Studies and Multicultural Civilizations: Africa (I)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

212. Area Studies and Multicultural Civilizations: Asia (I)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

213. Area Studies and Multicultural Civilizations: The Americas (I)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

214. Area Studies and Multicultural Civilizations: The Americas (II)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

215. Area Studies and Multicultural Civilizations: The Americas (III)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

216. Area Studies and Multicultural Civilizations: The Americas (IV)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

217. Area Studies and Multicultural Civilizations: The Americas (V)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

218. Area Studies and Multicultural Civilizations: The Americas (VI)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

219. Area Studies and Multicultural Civilizations: The Americas (VII)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

220. Area Studies and Multicultural Civilizations: The Americas (VIII)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

221. Area Studies and Multicultural Civilizations: The Americas (IX)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

222. Area Studies and Multicultural Civilizations: The Americas (X)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)

223. Area Studies and Multicultural Civilizations: The Americas (XI)
Fall, Spring, Summer. 4(4-4) credits. Open only to graduate students. Students are limited to a total of 10 credits in HNF 890 and HNF 894. Approval of department and field experience required. (QA: HNF 890)
INTEGRATIVE STUDIES IN ARTS AND HUMANITIES

**23IC.** 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 artistic traditions and methodologies in their historical 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 sociocultural contexts 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 Alwood 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 by topic.

**241D.** Creative Arts and Humanities: Theater and Society in the West
Spring. 4(4-0)
P: IAH 201.
Artistic creativity and its role in the development of theater. Presented in historical context. Influence on art, literature, music, and religion. Focus on translation of social visions into dramatic art. Plays and themes by term.

**241E.** Creative Arts and Humanities: The Creative Process
Spring of even-numbered years. 4(4-0)
P: IAH 201.
Philosophical, ethical, and historical foundations for understanding the creative process. Creation in visual arts, theater, 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 historical 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.
QF: MTH 109 ORMTH 111 QA: ICS 101 NS 125 NS 1824

**202.** Applications of Environmental and Organisinal 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.
QF: MTH 109 ORMTH 111 QA: ICS 121 NS 142

**202L.** Applications of Environmental and Organisinal Biology Laboratory
Fall, Spring, Summer. 1(0-3)
C: ISP 204
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.
QF: MTH 109 ORMTH 111 QA: ICS 120

**204L.** Applications of Biomedical Science Laboratory
Fall, Spring, Summer. 1(0-2)
C: ISP 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, and social and economic issues which accompany these advances.
QF: 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.
QF: 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: the impact on the human environment and history, and on cultural, social, philosophical, and political decisions.
QF: MTH 109 ORMTH 111 QA: GLO 200 GLO 201 GLO 305

**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: GLO 200 GLO 201 GLO 306

**205L.** Visions of the Universe
Fall, Spring, Summer. 3(3-0)
QF: 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.
QF: 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.
QF: 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 electromagnetism.

**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 modeling of the fundamental structures of all matter. Physical laws governing the structure of matter.
QF: MTH 109 ORMTH 111 QA: PHY 206