

Integrative Studies in Biological Science—ISB

- 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.

- 206H 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.

- 208L 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.

- 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.

- 203L 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.

- 205 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 placement test.

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**
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.

- 209 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.

- 213H 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 trigonometry

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.

- 215 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.

- 217 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.

- 221 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 STUDIES IN PHYSICAL SCIENCE

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: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.

- 201L 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.

INTEGRATIVE STUDIES IN SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES

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:M: (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:M: (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:M: (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:M: (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:M: (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:M: (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:M: (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:M: (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:M: (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.

ITALIAN

ITL

Department of French, Classics, and Italian College of Arts and Letters

101 Elementary Italian I
Fall, Spring. 4(4-1) RB: No previous experience in Italian or approval of department.

Practice in using and understanding Italian to develop listening, speaking, reading, and writing skills. Pronunciation, grammar, vocabulary, and cultural topics.

102 Elementary Italian II
Fall, Spring. 4(4-1) P:M: (ITL 101)

Further practice in using and understanding Italian to develop listening, speaking, reading, and writing skills. Pronunciation, grammar, vocabulary, and cultural topics.

201 Second-Year Italian I
Fall. 4(4-0) P:M: (ITL 102)

Intermediate-level review and development of aural comprehension, speaking, reading, and writing skills. Topics in Italian culture.

202 Second-Year Italian II
Spring. 4(4-0) P:M: (ITL 201)

Further review and development of aural comprehension, speaking, reading, and writing skills. Topics in Italian culture.

290 Independent Study
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

320 Advanced Grammar and Composition
Fall. 3(3-0) P:M: (ITL 202)

Composition in a variety of styles and modes. Review of grammar. Extensive practice in writing.

330 Italian Culture and Civilization
Spring, Summer. 3(3-0) Summer: Florence, Italy. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (ITL 202)

Diverse aspects of political, social, economic, intellectual, artistic, and literary life of Italy. Class discussion in Italian of readings, films, television programs, and musical selections.

350 Introduction to Italian Literature
Fall. 3(3-0) P:M: (ITL 330)

Italian literature from its origins to the present. Reading and discussion in Italian of representative works from all genres.

355 Italian Literature in English Translation
Spring of even years. 3(3-0) R: Not open to freshmen.

Representative works and themes of Italian literature.

360 Topics in the Italian Language and Culture
Summer. 3(3-0) Summer: Florence, Italy. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (ITL 330)

Aspects of Italian culture or language as manifested in art, literature, music, and film.

490 Independent Study
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

JAMES MADISON COLLEGE MC

James Madison College

111 Identity and Community: An Approach to Writing I
Fall. 3(3-0) R: Open only to students in James Madison College.

Identity and community in American and cross-cultural contexts. Influences of family, education, work, religion, gender, race, class and/or sexuality on identity and community. Focuses on critical reading and analytical writing.

112 Identity and Community: An Approach to Writing II
Spring, Summer. 3(3-0) P:M: (MC 111) RB: or approval of college. R: Open only to students in James Madison College.

Identity and community in American and cross-cultural contexts in selected historical eras. Reconstructing images of self and society in time of stress or transition. Emphasis on history, narrative, literature, film, art, politics. Principles of research, documentation, persuasive writing and speaking.

201 Introduction to the Study of Public Affairs I (D)
Fall. 4(4-0) R: Open only to students in James Madison College

Interdisciplinary exploration of enduring issues and conflicts in American and international public affairs. Historical, social science, and comparative approaches.