

480. Independent Study
Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 12 credits. Juniors, approval of department. Supervised individual study in a racial or ethnic area of interest.

485. Selected Topics in Racial and Ethnic Studies
Fall, Winter, Spring. 4(4-0) May reenroll for a maximum of 8 credits. College core or approval of department. Contemporary issues and problems in the minority programs.

495. Senior Seminar
Spring. 4(4-0) Seniors. Students will identify a major contemporary issue in racial and ethnic problems. A strategy for a solution will be developed and submitted to entire class.

RADIOLOGY RAD

**College of Human Medicine
College of Osteopathic Medicine**

480. Nuclear Medicine for Medical Technologists
Winter. 3(2-2) PHY 237, PHY 257; MTH 109; Junior or Senior Medical Technology majors. Terminology and fundamentals of radionuclides. Application to nuclear medicine. Radiation measurement, protection, biologic effects with discussion of instruments and imaging systems. Principles of radioimmunoassay. Radiopharmaceutical techniques and clinical interpretation.

501. Radiologic Anatomy
Fall, Summer. 2(2-0) Approval of department. Principles and techniques of X-ray use. Identification of anatomical structures depicted on X-ray films.

525. Fundamentals of X-ray Interpretation
Fall, Winter, Spring, Summer. 2(2-0) Admission to College of Human Medicine or College of Osteopathic Medicine. Others: approval of department. Beginning laboratory course in recognition and interpretation of the normal and abnormal X-ray image. Use of X-ray as alternative diagnostic approach in efficient management of patients.

526. Chest Radiology
Fall. 2(2-0) RAD 525. Principles of chest radiography. Normal chest radiogram and radiographic study of chest diseases, with emphasis on pathophysiologic and anatomic correlation.

527. Traumatology
Winter. 2(2-0) RAD 525. Clinical and radiographic evaluation of injured patients. Emphasis on efficacy of radiologic procedures.

550. Decision Analysis in Medicine
Winter of odd-numbered years. 2 to 4 credits. May reenroll for a maximum of 8 credits. Approval of department. Analysis of decisions in medicine, with emphasis on the diagnostic process and clinical judgment.

590. Special Problems in Radiology
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department. Special aspects of radiology and the use of X-rays in the efficient management of patients.

609. Radiology Clerkship
(H M 609.) Fall, Winter, Spring, Summer. 4 to 17 credits. May reenroll for a maximum of 17 credits. H M 602. Office and hospital based experience to acquaint the student with basic radiological information and develop X-ray interpretation skills.

610. Radiation Therapy Clerkship
Fall, Winter, Spring, Summer. 4 credits. H M 602; MED 608 and PHD 608 or SUR 608. Basic instruction in radiation therapy procedures and materials.

611. Nuclear Medicine Clerkship
Fall, Winter, Spring, Summer. 4 credits. H M 602; MED 608 and PHD 608 or SUR 608. Diagnostic and therapeutic procedures in nuclear medicine.

RELIGIOUS STUDIES REL

College of Arts and Letters

150. Understanding Religious Man (A)
Fall, Winter, Spring. 3(3-0) Nature of religion; character of reality; symbolism, myth, sacred space, sacred time, rationalism and the nature of religious knowledge; religion and morals; psychology of religious experience; societal function of religion.

151. Western Religions (A)
Fall, Winter, Spring. 3(3-0) Historical-comparative approach to Jewish, Christian, and Muslim beliefs, practices, and world-views, including views of God and other supernatural beings, nature and destiny of man, paths for spiritual achievement, death and after-life.

152. Eastern Religions (A)
Fall, Winter, Spring. 3(3-0) Historical-comparative approach to Hindu, Buddhist, Confucian, Taoist, and Shinto beliefs, practices, and world-views, including views of: nature of ultimate reality, nature and destiny of man, death and beyond.

220. Old Testament (A)
Fall. 3(3-0) A study of the history, literature and religion of Israel based on a critical examination of the Biblical texts.

221. Old Testament (A)
Winter. 3(3-0) A continuation of REL 220.

222. New Testament
Spring. 3(3-0) A study and analysis of the texts of the New Testament in light of their historical setting.

230. History of Christian Thought: Early and Eastern
Fall. 3(3-0) Development of Christology and the institutional Church, especially in the east from the first to the eleventh century. Gnosticism, Docetism, the Ecumenical Councils and major theologians studied from primary and secondary sources.

231. History of Christian Thought: Tertullian to Erasmus
Winter. 3(3-0) A study of representative western theologians from the North African to pre-reformation figures. Development of the papacy, scholasticism, medieval symbolism, and ecclesiastical movements in the western church. Historical roots of modern Christian doctrines.

232. History of Christian Thought: Erasmus to the Present
Spring. 3(3-0) Study of key philosophers, theologians, movements, events of these centuries, including reformation, Trent, enlightenment, biblical criticism, modernism, Vatican councils, neoorthodoxy, neothomism; Kant, Hegel, Marx, Troeltsch, Kierkegaard, Newman, Bonhoeffer.

295. Individual Readings
Fall, Winter, Spring. 1 to 5 credits. May reenroll for a maximum of 10 credits if a different topic is taken. Approval of department. Supervised independent study of a particular topic in religious studies not covered in the regular courses.

300. Life of Christ
Fall. 3(3-0) The life of Christ as recorded in the Gospels in light of Christian tradition and ancient and modern scholarship.

302. Writings of St. Paul
Winter. 3(3-0) Analysis of the major Pauline letters together with the Book of Acts in the light of their significance for the early Church and for contemporary Christianity.

305. Christian Ethics and Society
Winter. 4(3-0) The Biblical and theological basis for social action will be examined, also such areas of contemporary discussion as relation of love to justice, individual ethic to social ethic, situation to principle, the social order.

310. Christianity
Winter. 3(3-0) Origins and historical development of Christianity, major doctrines and liturgical practices, ethical stance, institutional forms (Eastern Orthodox, Roman Catholic, Protestant), social and cultural contributions, contemporary status and role.

315. Eastern Christianity
Spring. 3(3-0) Origins, faith and practice of the Orthodox Church in Russia and Eastern Europe, with attention to the history, beliefs and rites of the Coptic, Armenian, Ethiopian, and other Monophysite and Nestorian Churches and Uniate movement.

Descriptions – Religious Studies

of

Courses

331. Classical Judaism

Fall. 3(3-0)

Major developments in Jewish life and thought from Ezra to Maimonides, including the rise of the synagogue, Sabbath, rabbinic, Talmud, and Midrash. Representative Jewish thought during the Golden Age of Jewish-Arabic culture.

332. Modern Judaism

Winter. 3(3-0)

Major developments in Jewish life and thought in modern times, emphasizing the Hasidic, Reform, Zionist, Conservative, and Reconstructionist movements and reactions against them, and contemporary issues in Jewish thought.

335. Islam

Winter. 3(3-0)

The life and environment of Muhammad, analysis of the Qur'an; basic Islamic law, beliefs, schools of thought, and movements, history and expansion; unity and variety in Muslim civilizations; modern trends.

336. Life of Muhammad and the Qur'an

Spring of even-numbered years. 3(3-0)

Life and teachings of Muhammad as recorded in the Qur'an, Sira, and Hadith. Study of the text and doctrines of the Qur'an, its classical and modern Muslim, and Western interpretation.

337. Modern Islam

Spring of odd-numbered years. 3(3-0)

Major developments in Muslim thought and practice in modern times, with emphasis on reform and revivalist movements and contributions of key Muslim spokesmen in Arabia, Egypt, India/Pakistan, and Turkey.

350. Hinduism

Fall. 3(3-0)

The roots of Hinduism in Vedic tradition and Dravidian religion and the historical development of Hinduism. Hindu beliefs, rituals, practices, philosophical systems, spiritual paths, sects, and caste system. Role of Hinduism in Indian society.

353. Confucianism and Taoism

Spring of odd-numbered years. 3(3-0)

Confucianism, especially Mencius; Taoism, especially the Lao-Tzu and Chung-Tzu; Neo-Confucianism. Emphasis on the socio-ethical-political role of Confucianism and the mystical-metaphysical-religious role of Taoisms. Current status.

354. Shinto and Japan's New Religions

Spring of even-numbered years. 3(3-0)

Shinto as basis of traditional Japanese society; current status and role. The New Religions of Japan, including their roots, character, current status and role; special attention to Soka Gakkai.

355. Hinayana Buddhism

Fall. 3(3-0)

Siddhattha Gotama and the origins of Buddhism. Theravada in historical development; the Tipitaka and its teachings; epistemology, psychology, logic, science, and world-view; the Sangha and socio-political relations. Current status.

358. Mahayana Buddhism

Spring. 3(3-0)

The various schools of Mahayana, Tantric Buddhism, Lamaism (Tibetan Buddhism), and Zen. Geographical areas of India, China and Japan. Interactions with other religions; social, cultural and political impacts.

360. Contemporary Theology

Fall. 3(3-0)

Systematic study of contemporary theological schools of thought; an introduction to the theologians who typify these approaches to theology, primarily Christian; various personal, social and political theological issues under discussion today.

370. Religion in American Culture (A)

Fall. 3(3-0)

Historical and interpretative study of religion in American culture from Spanish and French explorations to 1860. Puritanism, deism, revivalism, communal movements, cults, pietism, development of the civil religion of 'Americanism'.

371. Religion in American Culture (A)

Winter. 3(3-0)

Historical and interpretative study of religion in American culture from 1860 to the present. Theological interpretations of the Civil War, industrialism, imperialism, social gospel, black religion, communal movements, cults, 'Americanism'.

372. American Civil Religion (A)

Spring. 3(3-0)

Theological, historical and sociological factors in the development and diversification of American civil religion; sense of identity, mission, and destiny; investigation of the theories of Bellah, Marty, Mead, Herberg, Novak.

380. Issues in Science and Religion

Winter. 4(4-0) Juniors or approval of department. Interdepartmental with the department of Natural Science and Justin Morrill College.

History of relationships between science and religion. Methods of science and religion. Attempts at resolution of conflicts and formation of new syntheses.

RESOURCE DEVELOPMENT

R D

College of Agriculture and Natural Resources

IDC. Resource Ecology and Man

For course description, see Interdisciplinary Courses.

202. Soils and Man's Environment

Winter. 3(3-0) Interdepartmental with the departments of Crop and Soil Sciences, Fisheries and Wildlife and Natural Resources and administered by the Department of Crop and Soil Sciences.

Use of soil-water resources in a technological society as it relates to environmental quality. Nature of pollution problems and their possible solutions. Food production and world population.

301. Conservation of Natural Resources

Fall, Winter, Spring, Summer. 3(3-0)

Development of conservation movement with broad treatment of basic natural resources (minerals, land, waters, forests, wildlife). Conservation practices and facilities, organizations, and agencies involved in their application. General introduction to field.

385. Junior-Senior Seminar

Fall, Winter. 1(1-0) Junior majors.

Current issues, problems and opportunities in resource development. Student involvement in discussions, analyses, and presentations on resource problems and possible solutions.

417. Land Economics

Fall, Spring. 4(4-0) Interdepartmental with the Department of Economics, Public Affairs Management and Food Systems Economics and Management.

Factors affecting man's economic use of land and space resources. Input-output relationships; development, investment, and enterprise location decisions. Land markets; property rights; area planning; zoning and land use controls.

420. Water Resource Development

Fall, Winter, Spring, Summer. 4(3-0)

Significance of water resources in modern society. Introduction to the needs of industry, agriculture and recreation. Concepts of development, use and conservation are critically evaluated in terms of future needs.

431. Law and Social Change

Fall, Spring. 3(3-0) BOA 440. Interdepartmental with the Department of Urban and Metropolitan Studies and Public Affairs Management and administered by the Department of Urban and Metropolitan Studies.

Law as applied to urban and rural context of social change. A review of both formal and informal aspects of system accessibility, institutional formation, government, civil rights, and human service.

435. Law and Resources

Spring. 3(3-0) R D 417 or BOA 440. Interdepartmental with the Department of Forestry.

Legal theories, cases, statutes and constitutional considerations are applied to natural resource utilization. Private and public property interests in natural resources are illustrated through case studies of use conflicts.

450. Natural Resource Administration

Fall, Spring. 4(4-0) Seniors. Interdepartmental with the departments of Fisheries and Wildlife, Forestry and Parks and Recreation Resources and Agriculture and Natural Resources. Administered by the Department of Forestry.

Concepts and methods of administering wildland properties. The legal, economic and social environment. Benefit-cost analysis of management changes. Unit organization, personnel management and accounting. Presents a systems view of administration.

455. Natural Resource Economics

Winter. 4(4-0) FOR 450 or approval of department. Interdepartmental with the departments of Fisheries and Wildlife, Forestry, Park and Recreation Resources and Agriculture and Natural Resources. Administered by the Department of Forestry.

Basic economic and political principles and techniques that govern the production and consumption of forest land products, including basic forest valuation procedures.

460. Regional Economics

Winter. 4(4-0) R D 417 or EC 324 or FSM 401. Interdepartmental with the Department of Economics, Public Affairs Management and Food Systems Economics and Management.

Forces affecting location decisions of firms, households and governments. Applications to agricultural, industrial, and regional developments.