#### 553 Introduction to Radiology

Spring. 1(1-0) R: Graduate-professional in colleges of Human and approval of Osteopathic Medicine or department.

Principles of medical diagnostic radiology: means of generating diagnostic images, and anatomical and physiological changes that result in such images.

#### 590 Independent Study

Fall, Spring, Summer. 1 to 3 credits. R: Approval of department.

Special aspects of radiology. Imaging as a diagnostic tool in patient management.

### 609 Radiology Clerkship

Fall, Spring, Summer. 4 to 8 credits. A student may earn a maximum of 32 credits in all enrollments for this course. R: Completion of two years of graduateprofessional program in College of Human Medicine College of Osteopathic Medicine.

Diagnostic imaging consultation. Participation in image interpretation and observation in hospital or out-patient radiology setting.

### **Advanced Neuroscience Techniques** Laboratory

Summer. 3(0-9) Interdepartmental with Neuroscience; Psychology; Pharmacology and Toxicology; Physical Medicine and Rehabilitation. Administered by Department of Neuroscience. P:M: (NEU 804 or concurrently) RB: (PHM 827 and ANT 839 and PSY 811) R: Open only to doctoral students in the Neuroscience major.

Methods of neuroscience research and the underlying principles on which these methods are based

# **RELIGIOUS STUDIES**

REL

# **Department of Religious Studies** College of Arts and Letters

### **Exploring Religion**

Fall, Spring. 3 credits.

Religion and religions as historical phenomena. Non-textual and textual religions. Theories of the origins and functions of religion. Exemplary voices from various traditions examined in their historical and doctrinal settings.

# Myth, Self, and Religion

Fall, Spring. 3(3-0)
The mythic quest for meaning, identity, value, and transcendence as seen through religious biography and literary narrative. Myth in relation to religious symbols and life-cycle rituals. Cross-cultural perspective on religious world views and the interpretation of myth as sacred narrative.

### Religion and Media 210

Fall. 4 credits.

Portrayal of religion by the media in cultures around the world. Use of the media to promote religious beliefs. Examples from documentary film, television, print media and the internet.

# Religion in America

Fall. 3(3-0)

History, themes and issues of religions in America from precolonial times to the present.

### 230 Shamanism, Trance and Sacred Journeys

Fall. 3(3-0)

Shamanic practice in different cultural and religious contexts. Ecstatic, cosmological, and performative dimensions. Healing, sacred knowledge, spiritual journeys, sacred space, presence in world religions, patterns of pilgrimage, theoretical debates regarding

#### 240 The Hindu Yoga Traditions

Fall of even years. 3(3-0)

Thought and practices (religious, philosophical, psychological, and social) of the Indian discipline known as Yoga. Yogic systems of the ancient and modern Hindu world.

## Magic and Mysticism: Western Esoteric **Traditions and Practices**

Fall. 3(3-0)

Surveys the history of Western esoteric traditions in Europe, England and North America including alchemy, magic, Jewish and Christian mysticisms, and secret or semisecret groups like Freemasonry. Transdisciplinary investigation of religion, science, literature, art and history.

### Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 12 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.

### Native American Religions 306

Spring. 3(3-0) R: Not open to freshmen Indigenous forms of spirituality among the Native American peoples. Materials from myth, ritual, ceremonial life, and art as ways of obtaining and sharing religious knowledge. Pervasive spiritual and cosmological themes.

### Judaism

Fall. 4(4-0) R: Not open to freshmen.

Jewish life, thought, and institutions. Jewish calendar. Second Temple and Rabbinic periods. Talmud and Midrash. Jewish life in Europe and Reform, Hasidic, Orthodox, Conservative movements. Anti-Semitism, Zionism, and the Holocaust. Current issues.

### Religion and Gender

Spring of even years. 3(3-0)

The relationship between religion and gender viewed through foundational sacred texts and historical interpreters that define gender, sexuality, the body, the divine. Contemporary responses to the relationship between religion and gender through ritual, liturgy, new religious movements, and feminist theology.

#### 320 Christianity

Spring. 3(3-0) R: Not open to freshmen. Origins and historical development of Christianity. Rituals, institutional forms (Eastern Orthodox, Catholic, Protestant). Monastic and mendicant movements. Major doctrines and their development. Contemporary status and role.

#### 330 Islam

Spring. 4(4-0) R: Not open to freshmen. Islam from the time of Muhammad to the present. Pre-modern developments: life of Muhammad. Qur'an, Hadith, Islamic law. Sunnis, Shiites, sects and their rituals. Unity and diversity. Modern movements and trends.

#### 340 Hinduism

Fall. 4(4-0) R: Not open to freshmen.

Historical, philosophical and doctrinal development. Vedic Sacrifice. Upanishads, Vashnavism, Yoga and meditation, Tantric and medieval forms, ritual and temple forms. Modern syncretism and interaction with Western world

### **Buddhism in South Asia**

Spring. 3(3-0) R: Not open to freshmen.

Early origins of Buddhism. Life of the Buddha. Formulation of the Samgha. Pali canon. Three turnings of the Wheel of the Law. Monastic developments vs. lay Buddhism. Buddhist meditation practices.

### Southeast Asian Religions

Fall. 3(3-0) R: Not open to freshmen.

Southeast Asia as a religious and cultural crossroads. The historic mix of Hinduism, Buddhism, Islam, Christianity, and Chinese religions. Diversity of indigenous animistic religions. Past and present relations between religions and the state.

### Religion and Society in Bali

Fall of even years. 4(4-0) R: Not open to freshmen.

The nature of Balinese religion. Temple and lifecycle ceremonies. Death and reincarnation. Ancestral temples. Trance and curing.

### African Religion: An Introduction 360

Spring of odd years. 3(3-0) R: Not open to freshmen

Variant forms of the religions of Africa. Indigenous African religions examined through their mythology, rituals, symbols, and social consequences. Islam and Christianity. Interaction between religion and politics.

# The End of the World in America

Spring. 3(3-0)

Examination of the ways in which Americans have anticipated the end of the world. Focus on millenial desires and anxieties within a larger theoretical and historical context. Sacred text, utopian ventures, prophecy, new religious movements, constructions of endtimes theology.

#### **Hebrew Bible/Old Testament** 410

Fall. 3(3-0) R: Not open to freshmen or sophomores.

Historical setting and types and meaning of the text of the Hebrew Bible (Christian Old Testament) explored through various techniques of historical, literary, and textual analysis.

### 411 Modern Jewish Thought

Spring of even years. 3(3-0) R: Not open to freshmen or sophomores.

Representative Jewish thought from Enlightenment to the present. Authors such as Moses Mendelssohn, Abraham Geiger, Leo Pinsker, Hermann Cohen, Franz Rosenzweig, Ahad Ha-Am, Martin Buber, Mordecai Kaplan, A. I. Heschel, and Emil Fackenheim.

#### 420 **New Testament**

Spring. 3(3-0) R: Not open to freshmen or sophomores.

The historical setting and types and meaning of the text of the New Testament explored through various techniques of historical, literary, and textual analysis.

# Religious Studies—REL

#### 431 Muhammad and the Qur'an

Spring of odd years. 3(3-0) R: Not open to freshmen or sophomore's.

Life and contributions of the Prophet Muhammad. The Qur'an as a historical source. Origin, compilation, contents, and arrangements of the Qur'an. Forms of the Qur'an: recitation, scripture, calligraphy, theological concept.

### Religious and Secular Cosmologies

Fall. 3(3-0) R: Not open to freshmen or sophomores.

Cosmological contents of religions. Religious questions

raised by secular cosmologies. Perspectives from phenomenology and anthropology of religion.

#### 471 The Ritual Process

Spring. 3(3-0) R: Not open to freshmen or sophomores.

Definitions of ritual. Aspects of ritual, such as repetitiveness and drama. Generic forms of ritual including passage rites, renewal rites, liminality, sacrifice, taboo, and divination. Experience of ritual and its power to inform and transform the participant.

### Anthropological Approaches to Religion Fall. 3(3-0) R: Not open to freshmen or 475

sophomores.

Religion and language as distinguishing human traits. The capacity to create symbols and the power of symbols. Early explanations of the origins of religion. Later functional appreciations of religion based on field studies. Leading theorists from different schools of religious studies.

### 480 **Comparative Studies in Religion**

Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Not open to freshmen or sophomores.

Multidisciplinary topics such as patterns in comparative religion, comparative mysticism, or comparative mythology.

### 490 Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 12 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.

### 491 Special Topics in Religious Studies

Fall, Spring. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

Special topics supplementing regular course offerings, proposed by faculty on a group study

### 499 Senior Thesis Research (W)

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement. R: Approval of department.

Individual research project supervised by a faculty member that demonstrates the student's ability to do independent research and submit or present a major paper.

#### 890 Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of

Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.

# **RESOURCE** DEVELOPMENT

# **Department of Resource** Development College of Agriculture and Natural Resources

### 200 Issues and Applications in Resource Development

Fall, Spring. 3(3-0)

Interdisciplinary problem solving. Environmental and community development choices. Gender and environmental assessments. Minerals and laws.

### **Environmental and Natural Resources** Fall, Spring. 3(3-0)

Physical, economic, and institutional aspects of natural resource and environmental policy. US doctrines for land, water, mineral, and environmental resource management

### Introduction to Gender and **Environmental Issues**

3(3-0) Interdepartmental with Spring. Wildlife; Forestry; **Fisheries** and Environmental Economics and Policy; Administered Women's Studies. Department of Fisheries and Wildlife. R: Not open to freshmen. SA: PRM 211

The concept of gender. Overview of environment and habitat. Historical gender roles in environmental management. Gender-based perspectives. Case studies on developing and developed countries. Environmental management with emphasis on fisheries, wildlife and wetlands. Women environmental professionals

### **Environmental Communication and** Conflict Management (W)

Fall, Spring. 3(3-0) P:M: Completion of Tier I writing requirement. R: Open only to sophomores or juniors or seniors in Environmental Studies and Applications. SA: AEE 310, RD 310

Environmental risk communications. Mitigation and public forum management.

### 301 Federal and State Environmental Policy

Fall, Spring. 3(3-0) R: Open only sophomores or juniors or seniors in the Resource Management Environmental Studies and Applications majors.

Federal and state environmental policies and processes. Resource conservation and emergency planning. Federal resource laws and regulations.

#### 302 **Natural Resource Issues**

Fall, Spring. 3(3-0) P:M: (EC 201 or EC 202) RB: (RD 200) R: Open only to sophomores or juniors or seniors in the Public Resource Management or Environmental Studies and Applications majors.

Analytical frameworks and concepts in resource development and use. Property rights. Market and non-market allocations. Stakeholder perspectives. Role of scholar-practitioner.

### 313 **Grantwriting and Fund Development** Fall. 3(3-0)

RD

Theoretical and practical background for proposal writing. Program and strategic planning. Fundraising and institutional advancement.

# **Environmental Assessment of Land Uses**

Fall. 3(3-0) RB: (RD 200)

Environmental issues related to land-use. Environmental assessment for land-use decisions. Data acquisition and processing techniques. Spatial analysis methods.

#### 315 **Applications of Survey Research**

Fall. 3(3-0) R: Open only to juniors or seniors.

Design and use of survey procedures in organizational, community and research settings.

### 316 Land Use and Natural Resource Management

Spring. 3(3-0) RB: (RD 200)

Natural resource and community issues associated with changes in land use. Adaptive planning and decision making for land use and natural resource management. Environmental nental and building and economic Consensus analysis. conflict management.

### **Resource Management and Planning** Fall. 3(3-0) RB: (RD 200) 320

Concepts, principles, and objectives of management and planning. Population dynamics, resource demand, and impact and suitability assessment for sustainable development.

## Water Resource Management

Spring. 3(3-0) RB: (RD 200)

Interface between the hydrologic cycle and human factors, and resulting environmental consequences. Economic, administrative, policy, and political factors.

### Introduction to Waste Management 326

Fall. 3(3-0) Interdepartmental with Fisheries and Wildlife. RB: (RD 200)

Waste management definitions, techniques, technologies, and strategies. Integrative approach to waste management as an environmental, social, and political subject.

#### 336 State Environmental Law

Spring. 3(3-0) RB: (RD 200 and RD 301) State-level legal and regulatory management of environmental issues. Environmental assessment and auditing. Regulatory compliance. Permit process. Right-to-know. Land and water use

### Forest Hydrology 409

Spring. 3(2-2) Interdepartmental Forestry; and Soil Sciences. Crop Administered by Department of Forestry. RB: (CSS 210 and MTH 116) or (MTH 104 or LBS 117) R: Not open to freshmen or sophomores.

Science and technology of the hydrologic cycle and water resources in forest, wildland, wetland, and rural watersheds.