218A. Fundamentals of Animal Behavior (5)
Lecture/discussion—4 hours; discussion—1 hour. Prerequisite: consent of instructor; upper-division undergraduate introduction to the biology of behavior, such as course 101, 122, 123, Neurobiology, Physiology and Behavior 102, 150, 152, Wildlife, Fish, and Conservation Biology 141, Entomology 104, or Animal Science 105. Survey of the phenomena and theory of animal behavior from the perspectives of multiple biological disciplines, including evolution, ecology, psychology, genetics, neurobiology, endocrinology, and animal science. (Same course as Animal Behavior 218A.)—F. (F.) Sih

218B. Fundamentals of Animal Behavior (5)
Lecture/discussion—4 hours; discussion—1 hour. Prerequisite: consent of instructor; course 209A. Survey of the phenomena and theory of animal behavior from the perspectives of multiple biological disciplines, including evolution, ecology, psychology, genetics, neurobiology, endocrinology, and animal science. (Same course as Animal Behavior 218B.)—F. (F.) Sih

220. History of Psychology (4)
Lecture—2 hours; seminar—2 hours. Prerequisite: undergraduate standing in psychology or consent of instructor. A lecture-seminar on the history of psychology focusing on the development of major psychological theories and research to contemporary investigations. Offered in alternate years.—Simonton

221. Academic Writing in Psychology (4)
Lecture/discussion—2 hours; term paper. Prerequisite: consent of instructor; Class size limited to 10 students. Strategies for developing and honing academic writing skills and writing productivity, with a particular focus on how to write a clear and compelling empirical journal article in psychology. May be repeated four times for credit with consent of instructor if student chooses to focus on a substantially different writing project. Offered irregularly.—F. Underwood

230. Cognitive Psychology (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Analysis of the mental processes by which knowledge is acquired, manipulated, stored, retrieved and used. Offered in alternate years.—F. Long, Mangun

231. Sensation and Perception (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Analysis of the role of sensory processes and perception in experience and their effects on behavior. Offered in alternate years.—S

241. Attitudes and Social Influence (4)
Lecture/discussion—3 hours; term paper. Prerequisite: consent of instructor. Survey of theory and research in the field of attitudes and social influence. Topics include attitude definition and measurement, major theories of attitude formation and change, the relationship between attitudes and behavior, and recent directions and controversies. Offered irregularly.—Ledgerwood

243. Social Cognition (4)
Lecture/discussion—3 hours, term paper. Prerequisite: consent of instructor. Processes underlying the perception, memory, and judgment of social stimuli, the effects of social and affective factors on cognition, and the interpersonal consequences of those processes. Topics include automaticity/control, motivated cognition, person perception, stereotyping, attitudes, and persuasion. Offered irregularly.—Pickett, Sherman

244. Stereotyping, Prejudice, and Stigma (4)
Lecture/discussion—3 hours; term paper. Prerequisite: consent of instructor. This course examines the social psychological understandings of stereotyping, prejudice, and prejudice-related phenomena, including sociocultural, motivational, and cognitive factors. Offered irregularly.—Herk, Sherman

245. Social Psychology (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Theory and research in social psychology.—S. (F.) Pickett, Robinson

247. Personality (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Introduction to the study of person and behavior. May be repeated for credit when topic differs. Offered in alternate years.

251. Topics in Genetic Correlates of Behavior (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Theory and experimental in the genetic contributions to animal and human behavior. May be repeated for credit when topic differs. Offered in alternate years.

252. Topics in Psychobiology (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Critical study in a selected area of psychobiology. May be repeated for credit when content differs. Offered in alternate years.

261. Cognitive Neuroscience (4)
Lecture—3 hours; discussion—1 hour. Prerequisite: graduate student standing in Psychology or Neuroscience or consent of instructor. Seminar in the methods of cognitive neuroscience. Topics include functional imaging and connectivity, perception, problem solving and decision making, with an emphasis on the common underlying cognitive processes. May be repeated for credit when content differs. Offered in alternate years.

264. Topics in Psycholinguistics (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Selected topics in language processing, memory, perception, problem solving, and thinking, with an emphasis on the common underlying cognitive processes. May be repeated for credit when content differs. Offered in alternate years.

270. Topics in Personality and Social Psychology (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Critical study of a selected area of personality or social psychology. May be repeated for credit when topic differs.—F. (F.)

272. Topics in Developmental Psychology (4)
Seminar—4 hours. Prerequisite: graduate standing in Psychology or consent of instructor. Critical study of a selected area of psychology. May be repeated for credit when content differs. Offered in alternate years.

289A. Current Research in Psychology (2)
Seminar—2 hours. Prerequisite: graduate standing in Psychology or consent of instructor. Current research in psychology. May be repeated for credit when topic differs. (Deferred grading only; pending completion of sequence.)

289B. Current Research in Psychology (2)
Discussion—2 hours. Prerequisite: course 289A; graduate standing in Psychology or consent of instructor. Intensive examination of contemporary theory and empirical research in specialized topics in psychology. Topics include developmental attachment, social neuroscience, mental health, emotion, sexual orientation and identity. May be repeated for credit if topic differs. (Deferred grading only; pending completion of sequence.)

290. Seminar (4)
Seminar—4 hours. Prerequisite: graduate standing in psychology or consent of instructor. Seminar devoted to a highly specific research topic in any area of basic psychology. Special topic selected for a quarter will vary depending on interests of instructor and students.—F. W. S. (F, W, S.)

298. Group Study (1-5)
(S/U grading only;—F. W. S. (F, W, S.)

299. Research (2-9)
(S/U grading only;—F. W. S. (F, W, S.)

290D. Dissertation Research (1-12)
Prerequisite: consent of instructor. (S/U grading only)

Professional

390A. The Teaching of Psychology (6)
Discussion—6 hours; lecture—6 hours; practice—6 hours. Prerequisite: advanced graduate standing in psychology or a closely related discipline and consent of instructor. Methods and problems of teaching psychology at the undergraduate and graduate levels; curriculum design and evaluation. Practical experience in the preparation and presentation of material. (S/U grading only; deferred grading only, pending completion of sequence.)—W. S. (W, S.) Simonton

390B. The Teaching of Psychology (6)
Discussion—6 hours; lecture—4 hours; practice—2 hours. Prerequisite: advanced graduate standing in psychology or a closely related discipline and consent of instructor. Methods and problems of teaching psychology at the undergraduate and graduate levels; curriculum design and evaluation. Practical experience in the preparation and presentation of material. (S/U grading only; deferred grading only, pending completion of sequence.)—W. S. (W, S.) Simonton

396. Teaching Assistant Training Practicum (1-4)
Prerequisite: graduate standing. May be repeated for credit. (S/U grading only) F. W. S. (F, W, S.)

Quantitative Biology and Bioinformatics

(College of Biological Sciences)
The interdisciplinary minor in Quantitative Biology and Bioinformatics is an integrative program that introduces students to the quantitative and computational approaches that are redefining all disciplines in the biological sciences, from molecular and cell biology, through genetics and physiology, to ecology and evolutionary biology. Students in this minor will learn research tools that apply mathematical and computational methods, increase their insight into the strengths and limitations of quantitative approaches, and develop the interdisciplinary perspective that is now the foundation of modern biological research and training.
The minor in Quantitative Biology and Bioinformatics is open to all undergraduates regardless of major and is sponsored by the College of Biological Sciences.

Minor Program Requirements:

Quantitative Biology and Bioinformatics................................. 18-24

Core Courses .........................................................................B12
Programming: Computer Science.............................................
Engineering 10 or 30 or the equivalent* ........................................4
Quantitative Biology: Biological Sciences...............................132 or Mathematics 124 ............................................... 4
Bioinformatics: Computer Science..........................................124 or 129 ....................................................................4
Quantitative and Computational Preparation.................................................. 4
Complete one course from the following: Applied Science Engineering 115, Biomedical Engineering 105; Computer Science Engineering 122, 130; Mathematics 123, 128BC, 135A; Statistics 130A, 131A, 141A

*The programming requirement may be satisfied by previous experience and therefore may not entitle college course credit. Please see your minor adviser for this determination and its possible impact on your unit requirements for the minor.

Restricted Electives: 6-8

Complete two or more courses from the following list to achieve a total of 18-24 units:
- Biological Sciences 134, 180, 181, 183; Biomedical Engineering 102, 117, 140, 141, 151; Biotechnology 150;
- Computer Science Engineering 165A, 166; Evolution and Ecology 102, 103, 104, 175; Microbiology 105; Molecular and Cellular Biology 123, 143, 182; Neurobiology, Physiology, and Behavior 166, 167; one course from: Environmental Science and Policy 121 or Wildlife, Fish, and Conservation Biology 122

Restrictions. No more than two upper division courses from a single department may be offered in satisfaction of the minor requirements. Only one course used to satisfy a requirement for the minor may be applied toward a student’s major.

Minor Adviser. Consult the Biological Academic Success Center (BASC). 1023 Sciences Laboratory Building; 530-752-0410; http://basc.ucdavis.edu/

Radiation Oncology
See Medicine, School of, on page 427.

Radiology
See Medicine, School of, on page 427.

Range Science
[College of Agricultural and Environmental Sciences]

Faculty. See Plant Sciences, on page 514.

Related Program. See Ecological Management and Restoration, on page 290.

Related Courses. See Plant Sciences 101, 112, 130, 131, 135; Nutrition 115; Soil Science 105, 120; Wildlife, Fish, and Conservation Biology 151.

Religious Studies
[College of Letters and Science]

Archana Venkatadri, Ph.D., Chair
Program Office. 213 Sproul Hall 530-752-1219; http://religions.ucdavis.edu

Faculty
Allison Coudert, Ph.D., Professor
Mark Emore, Ph.D., Assistant Professor
Naomi Janowitz, Ph.D., Professor
Meaghan O'Keefe, Ph.D., Assistant Professor
W. Flagg Miller, Ph.D., Professor
Eva Mroczek, Ph.D., Assistant Professor
Seth Sandberg, Ph.D., Professor
Mairaj U. Syed, Ph.D., Assistant Professor
Archana Venkatadri, Ph.D., Associate Professor
Keith Waterpaugh, Ph.D., Professor

Emeriti Faculty
Whalen W. Iai, Ph.D., Professor Emeritus

The Major Program
Religion is a major force in human experience. It has shaped the world’s history, literature, art, culture, politics, ethics, and economics. In addition to offering courses in all the major religious traditions (Judaism, Christianity, Islam, and Hinduism,...), the Religious Studies Program has developed cross-cultural courses dealing with religious symbols, myths, and rituals in written texts, art, theater, and film, and the Internet, as well as courses dealing with such topics as religion and the body, the rise of fundamentalism, religion and science, religion and ethics, and religion and violence.

The Program. The major introduces students to the academic study of religion. Students can choose from a broad range of courses both in the program itself and in other departments and programs—history, philosophy, psychology, sociology, anthropology, American studies, classics, and medieval studies. In addition to studying religious thought per se, students in the major can also study the way religion has shaped human behavior in such matters as family life, gender roles, ethics, artistic life, concepts of individual freedom, the pursuit of science, and economics. For some students, Religious Studies is an appropriate second major and combines well with anything from philosophical or historical agricultural development, political science, and the physical sciences.

Career Alternatives. Because of the program’s focus on developing critical thinking, writing, and reading skills, students who major in Religious Studies are well prepared to enter a variety of careers, including teaching, the health professions, law, business, and government. In an increasingly global society, knowledge of the world’s religious traditions and practices has become an essential part of a student’s education.

A.B. Major Requirements:

<table>
<thead>
<tr>
<th>Course Equivalents.</th>
<th>Required Courses</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preparatory Subject Matter</strong></td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>(A) One course from the Religious Studies 1 series</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(B) Four courses from other Religious Studies lower division offerings</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Equivalents.</th>
<th>Required Courses</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depth Subject Matter</strong></td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Religious Studies 100</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nine upper division Religious Studies courses</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

Four of these upper division courses related to religion that are offered by other departments and taken with the approval of a Religious Studies adviser.

Total Units for the Major | 60 |

Recommended. A reading knowledge of a foreign language is highly recommended.

Course Equivalents. The major advisers have a list of lower and upper division courses that can be substituted for courses suggested above.

Major Advisers. Consult the Program office.

Minor Program Requirements:

<table>
<thead>
<tr>
<th>Course Equivalents.</th>
<th>Required Courses</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Religious Studies</strong></td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Lower division course</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Upper division courses</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

Religious Studies 100 required. Some substitutions from other departments or programs allowed with consent of adviser.

Minor Advisers. Same as major advisers.

Honors and Honors Program. A student becomes eligible for graduation with honors by meeting the minimum course and credit requirements established by the College of Letters and Science. Upon successful completion of the additional requirements of the College of Letters and Science Honors Program, individual students may be recommended by the program for graduation with high honors or highest honors on the basis of an evaluation of their academic achievements in the major.

Education Abroad Program. The Religious Studies program encourages students to study in the Summer Abroad program, the Quarter Abroad program, or the Education Abroad program. With the approval of a major adviser, a course taken abroad may be accepted in the major or minor program.

Teaching Credential Subject Representative. See the Teaching Credential/M.A. Program on page 124.

Hebrew. Students interested in Hebrew courses should see http://classics.ucdavis.edu/hebrew.


Courses in Religious Studies (RST)

Lower Division
1. Survey of Religion (4)
Lecture—3 hours; discussion—1 hour. Basic concepts introduced through readings of the primary religious literature. Discussion of central ideas (creation, history, law, prophecy, suffering, mysticism, ascetism, karma, reincarnation, moksha, etc.); readings from the Bible, Bhagavad Gita, the Koran, selections from Plato and early Buddhist writings. GE credit: ArtHum, Div, Wrt | ACGH, AH, DD, OL, VL, WE.

1A. Pilgrimage (4)
Lecture—3 hours; discussion—1 hour. Introduction to comparative religion, focusing on the theme of the pilgrimage in different religious traditions. Not open to students who have taken course 3A. GE credit: ArtHum, Div, Wrt | AH, WC, WE.

1B. Death and Afterlife (4)
Lecture—3 hours; discussion—1 hour. Introduction to comparative religion, focusing on the theme of death and the afterlife in different religious traditions. Not open to students who have taken course 3B. GE credit: ArtHum, Div, Wrt | AH, OL, VL, WC, WE.

1C. Sacrifice (4)
Lecture—3 hours; discussion—1 hour. Introduction to comparative religion, focusing on the theme of sacrifice in different religious traditions. Not open to those who have taken course 3C. GE credit: ArtHum, Div, Wrt | AH, OL, VL, WC, WE — Coudert

1D. Conversion (4)
Lecture—3 hours; discussion—1 hour. Introduction to comparative religion, focusing on the theme of conversion in different religious traditions. Not open to those who have taken course 3D. Offered irregularly. GE credit: ArtHum, Div, Wrt | AH, WC, WE.

1E. Fundamentalism (4)
Lecture—3 hours; discussion—1 hour. Introduction to comparative religion, focusing on the idea of fundamentalism in different religious traditions. Not available to those who have taken course 3E. GE credit: ArtHum or SocSci, Div, Wrt | AH or SS, OL, VL, WE — Miller

1F. Religion Today (4)
Lecture—3 hours; discussion—1 hour. Introduction to comparative religion, focusing on the idea of fundamentalism in different religious traditions. Not available to those who have taken course 3F. GE credit: ArtHum, Div, Wrt | AH, VL, WC, WE — F.

1G. Myth, Ritual, and Symbolism (4)
Lecture—3 hours; discussion—1 hour. Myths, rituals and religious symbols found in a variety of religious traditions including examples from ancient and contemporary religious life. Variety of religious phenomena; validity of different approaches to the study of religion. Not open to students who have taken and received unit credit for course 2. GE credit: ArtHum, Div, Wrt | AH, OL, VL, WC, WE — F; W. F, WJ

Janowitz