

**495 Independent Study**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department.

Individual research and reading supervised by a faculty member.

## PORTUGUESE PRT

### Department of Spanish and Portuguese College of Arts and Letters

**101 Elementary Portuguese I**  
Fall. 4(4-1) R: No previous experience in Portuguese or approval of department.

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

**102 Elementary Portuguese II**  
Spring. 4(4-1) P:M: (PRT 101)

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

**201 Second-Year Portuguese I**  
Fall. 4(4-0) P:M: (PRT 102)

Intermediate level review and development of aural comprehension, speaking, reading, and writing skills. Topics in the cultures of the Portuguese-speaking world.

**202 Second-Year Portuguese II**  
Spring. 4(4-0) P:M: (PRT 201)

Further review and development of aural comprehension, speaking, reading, and writing skills. Topics in the cultures of the Portuguese-speaking world.

**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 Portuguese**  
Fall. 3(3-0) P:M: (PRT 202)

Conversation, reading, and writing to develop proficiency.

**340 Topics in Luso-Brazilian Language and Culture**  
Spring. 3(3-0) P:M: (PRT 202)

Cultural issues related to Portuguese-speaking countries.

**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: Approval of department.

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

## PSYCHOLOGY PSY

### Department of Psychology College of Social Science

**101 Introductory Psychology**  
Fall, Spring, Summer. 4(4-0)

Mind and behavior from biological, individual, and social perspectives. Scientific and professional aspects of psychology.

**200 Cognitive Psychology**  
Fall, Spring, Summer. 3(3-0) P:M: (PSY 101)

Concepts, theories, methods, and research findings in human information processing. Attention, perception, memory, problem solving, decision making, and language comprehension and production.

**204 Lesbian, Bisexual, and Gay Studies: Psychological and Cultural Issues**  
Spring of odd years. 3(3-0) Interdepartmental with Women's Studies. Administered by Women's Studies Program.

Nature, origins, and development of sexual orientation and sexual identity in the context of personality, culture, and society. Multicultural and feminist perspectives on the relationship between sexual orientation and gender, race, class, ethnicity, and religion.

**209 Brain and Behavior**  
Fall, Spring. 3(3-0) P:M: (PSY 101)

Relation of structure and function of the nervous system to the biological bases of behavior.

**235 Social Psychology**  
Fall, Spring, Summer. 3(3-0) P:M: (PSY 101) Not open to students with credit in SOC 241.

Major topics, theories, and research findings in social psychology, particularly as viewed from a psychological perspective.

**236 Personality**  
Fall, Spring, Summer. 3(3-0) P:M: (PSY 101)

Theories of personality, assessment techniques, and research on personality functioning and individual differences in interpersonal behavior. Emphasis on normal behavior.

**239 Psychology of Women**  
Fall. 3(3-0) P:M: (PSY 101)

Development and implications of sex-typed behavior and sex differences. Women's decisions about and experiences of menstruation, sexuality, motherhood, relationships, achievement, employment, retirement.

**244 Developmental Psychology: Infancy Through Childhood**  
Fall, Spring, Summer. 3(3-0) P:M: (PSY 101)

Physical, cognitive, emotional, and social development from infancy through childhood.

**246 Sensitivity to Children I**  
Fall. 3(2-2) P:M: (PSY 101) R: To receive credit PSY 246 and PSY 247 must be completed satisfactorily except by prior arrangement with instructor. Not open to students who have completed more than 6 credits of PSY 490 and PSY 491 combined.

First course of two-semester sequence that emphasizes weekly play with a child and analysis of videotaped sessions. Readings and discussions cover problems faced by parents, teachers and child therapists.

**247 Sensitivity to Children II**  
Spring. 3(2-2) P:M: (PSY 246) R: To receive credit PSY 246 and PSY 247 must be completed satisfactorily except by prior arrangement with instructor.

Weekly play with a child to understand child development and to increase skills in communicating with children.

**255 Industrial and Organizational Psychology**  
Spring, Summer. 3(3-0) P:M: (PSY 101)

Recruitment, selection, and training of personnel. Performance appraisal, leader behavior, worker attitudes and behavior, communication, group organization, and processes in the workplace.

**270 Community Psychology**  
Fall. 3(3-0) P:M: (PSY 101)

Theory and research in community psychology. Prevention, social change, dissemination models, empowerment, and measurement models.

**280 Abnormal Psychology**  
Fall, Spring, Summer. 3(3-0) P:M: (PSY 101)

Theory and research on dynamics, characteristics, and treatment of psychological disorders. Therapies and theories of prevention.

**295 Data Analysis in Psychological Research**  
Fall, Spring, Summer. 3(3-0) P:M: (PSY 101) and (MTH 110 or MTH 114 or MTH 116 or MTH 124 or MTH 106) or (MTH 132 or MTH 152H or MTH 201 or STT 200 or STT 201) Not open to students with credit in STT 315.

Descriptive and inferential statistics as applied to the analysis of psychological research. Measurement, control, and research design with psychological variables. Data analysis. Interpreting research findings. Relations between research and theory.

**320 Health Psychology**  
Fall, Spring. 3(3-0) P:M: (PSY 101)

Social, psychological, and biological factors affecting health, illness, and use of health services. Stress and coping processes, lifestyles, and illness management.

**325 Affect and Self Esteem**  
Fall, Spring. 3(3-0) P:M: (PSY 101)

Psychological study of affect as a mediator of stress, self esteem, and powerlessness. Development of psychological health, personal identity, and interpersonal competence through principles of affect.

**330 Personality from a Psychoanalytic Perspective**  
Fall, Spring. 3(3-0) P:M: (PSY 101)

A Freudian framework, including psychosocial development, dreams, unconscious processes, defense mechanisms, prejudice, discrimination, cults, inability to sleep, anxiety, depression, schizophrenia, sexual problems, and love.

**344 Developmental Psychology: Adolescence Through Youth**  
Spring, Summer. 3(3-0) P:M: (PSY 244)

Theory and research in physical, cognitive, emotional, and social development from puberty to early adulthood.

## Psychology—PSY

- 371 Psychological Innovations and Research I**  
Fall, Spring, Summer. 4(2-4) P:M: (PSY 101) R: Approval of department. To receive credit PSY 371 and PSY 372 must be completed satisfactorily except by prior arrangement with instructor. Not open to students who have completed more than 6 credits of PSY 490 and PSY 491 combined. First course of two-semester sequence. Theoretical and technical background and direct involvement in a major psychological innovation or research project.
- 372 Psychological Innovations and Research II**  
Fall, Spring, Summer. 4(2-4) P:M: (PSY 371)  
Second course of a two-course sequence. Theoretical and technical background and direct involvement in a major psychological innovation or research project.
- 395 Research Design and Measurement in Psychological Research**  
Fall, Spring, Summer. 3(2-2) P:M: (PSY 295) SA: PSY 304  
Validity and reliability concepts in psychological measurement and causal inference. Experimental design in psychological research.
- 401 Memory and Skill (W)**  
Fall of even years. 3(3-0) P:M: (PSY 200 and PSY 295) and completion of Tier I writing requirement.  
Human learning, memory, and skilled performance. Effects of attention, practice, and knowledge on cognitive and perceptual motor skills.
- 402 Sensation and Perception (W)**  
Fall of even years. 3(3-0) P:M: (PSY 295) and (PSY 200 or PSY 209) and completion of Tier I writing requirement.  
Biological and psychological approaches to the study of the extraction, representation, and interpretation of sensory information. Review of major methodologies. Emphasis on vision.
- 403 Laboratory in Cognitive Psychology (W)**  
Fall, Spring. 3(2-2) P:M: (PSY 200 and PSY 295) and completion of Tier I writing requirement. SA: PSY 302  
Rationale, methods, data analysis, and interpretation of experimental research in cognitive psychology.
- 405 History of Modern Psychology (W)**  
Spring. 3(3-0) P:M: (PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology.  
Themes, periods, and contributions of the leading psychologists. Psychological systems such as behaviorism, cognition, and psychoanalysis. Evolution of psychological concepts. Social context.
- 409 Psychobiology of the Life Span (W)**  
Spring of odd years. 3(3-0) P:M: (PSY 209 or ZOL 402) and completion of Tier I writing requirement.  
Current research on the development and aging of the brain. Aging and behavior.
- 410 Neurobiology of Learning and Memory (W)**  
Fall. 3(3-0) P:M: (PSY 209 or ZOL 402) and completion of Tier I writing requirement. SA: PSY 308  
Neural mechanisms responsible for learning and memory.
- 411 Psychobiology of Motivation (W)**  
Spring of even years. 3(3-0) P:M: (PSY 209 or ZOL 402) and completion of Tier I writing requirement.  
Current research on biological mechanisms that control motivation.
- 413 Laboratory in Behavioral Neuroscience (W)**  
Fall. 4(2-4) Interdepartmental with Zoology. P:M: (PSY 209 or ZOL 402) and (PSY 295 or concurrently or STT 201) and completion of Tier I writing requirement. SA: PSY 309  
Theory and laboratory experience in the study of behavioral neuroscience. Relationship among hormones, brain, and behavior.
- 424 Child and Family Psychopathology (W)**  
Fall, Spring, Summer. 3(3-0) P:M: (PSY 244 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology or students in the Psychology disciplinary minor.  
Description, etiology, and developmental patterns of behavior problems of children, adolescents, and their families. Child and family interventions.
- 440 Attitudes and Social Cognition (W)**  
Fall of even years. 3(3-0) P:M: (PSY 235 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology.  
Psychological research on the cognitive foundations of social behavior. Attribution, stereotyping, impression formation, social memory, and persuasion.
- 441 Interpersonal Behavior and Groups (W)**  
Spring of even years. 3(3-0) P:M: (PSY 235 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology.  
Major theories and research findings in the social psychology of group processes and interpersonal relationships.
- 442 Stereotypes, Prejudice, and Discrimination (W)**  
Fall of odd years. 3(3-0) P:M: (PSY 235 and PSY 295) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology or in the Interdisciplinary Studies in Social Science major.  
Cognitive processes in stereotyping. Contribution of affect and motivation to the linkages among stereotypes, prejudice, and discrimination.
- 450 Thinking Critically About Psychological Research (W)**  
Spring. 3(3-0) P:M: (PSY 295) and completion of Tier I writing requirement. SA: PSY 307  
Statistical and methodological principles from the perspective of a critical consumer of research results. Recognizing non-empirical assertions, necessary bases for inferring relationships and causal relationships, common threats to research validity, and pertinent biases in human judgment.
- 455 Organizational Research Techniques (W)**  
Spring. 3(3-0) P:M: (PSY 255 and PSY 395) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology or in the Interdisciplinary Studies in Social Science major.  
Quantitative psychological research techniques applied to human resource problems in organizations. Survey research, job analysis, training needs analysis, evaluation and selection, and test validation.
- 463 Introduction to Cognitive Science**  
Spring. 3(3-0) Interdepartmental with Linguistics; Philosophy. Administered by Department of Linguistics and Germanic, Slavic, Asian and African Languages. RB: (PHL 462 or LIN 401 or CSE 440 or PSY 200)  
Cognitive processing of information by animals, humans, and computers. Relevant issues in philosophy, linguistics, psychology, neurophysiology, and artificial intelligence.
- 475 Personality Theories (W)**  
Spring of odd years. 3(3-0) P:M: (PSY 236) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Psychology.  
Major personality theories of development, structure, and dynamics. Implications for behavioral disorders and therapy.
- 490 Special Problems in Psychology**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. P:M: (PSY 295) R: Open only to juniors or seniors with at least 9 credits in psychology. Students are limited to a combined total of 9 credits in PSY 490 and PSY 491. Students who completed PSY 246, PSY 247 or PSY 371, PSY 372 are limited to a combined total of 6 credits in PSY 490 and PSY 491. Approval of department.  
Each student will work under direction of a faculty member on an experimental, theoretical, or applied problem.
- 491 Participation in Psychological Project**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to juniors or seniors with at least 9 credits in psychology. Students are limited to a combined total of 9 credits in PSY 490 and PSY 491. Students who completed PSY 246, PSY 247 or PSY 371, PSY 372 are limited to a combined total of 6 credits in PSY 490 and PSY 491. Approval of department.  
Each student will participate in a psychological project under direction of a faculty member.
- 492 Special Topics in Psychology**  
Fall, Spring. 1 to 3 credits. P:M: (PSY 101 and PSY 295)  
Special topics supplementing regular course offerings proposed by faculty.
- 493 Issues in Psychology (W)**  
Fall, Spring. 3(3-0) P:M: (PSY 101 and PSY 295) and completion of Tier I writing requirement.  
Current information, research, and practice in psychology.

**498H Development of Research Proposal**  
Fall, Spring, Summer. 3(0-6) R: Approval of department.

Independent research with faculty supervision. Literature survey, naturalistic observation, and experimental investigation. Preparation of the proposal for the Senior Honors Thesis.

**499H Senior Honors Thesis**  
Fall, Spring, Summer. 3(0-6) P:M: (PSY 498H) R: Approval of department.

Continuation of independent research with faculty supervision. Completion of senior honor thesis.

## RADIOLOGY

## RAD

### Department of Radiology College of Human Medicine

**401 Quantitative Human Biology**  
Spring. 3(4-0) Interdepartmental with Biomedical Engineering; Materials Science and Engineering; Human Anatomy. Administered by College of Engineering. P:M: (MTH 235 and PHY 184) and (PSL 250 or concurrently or PSL 431 or concurrently) and (CEM 141 or CEM 151) and (ANTR 350 or concurrently) RB: (CSE 131 or concurrently or CSE 231 or concurrently or PSL 410)

Qualitative description and quantitative engineering analysis of selected, tractable human-biological systems. Multi-disciplinary problem-solving among medical and engineering professionals.

## RELIGIOUS STUDIES

## REL

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

**101 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.

**205 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.

**210 Religion and Media**  
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.

**220 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 shamanism.

**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.

**275 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.

**290 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.

**306 Native American Religions**

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.

**310 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 America. Hasidic, Reform, Orthodox, and Conservative movements. Anti-Semitism, Zionism, and the Holocaust. Current issues.

**315 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, devotional Vashnavism, Yoga and meditation, Tantric and medieval forms, ritual and temple forms. Modern syncretism and interaction with Western world views.

**350 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.

**355 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.

**360 African Religion: An Introduction**

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.

**370 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 millennial desires and anxieties within a larger theoretical and historical context. Sacred text, utopian ventures, prophecy, new religious movements, cultural constructions of endtimes theology.

**410 Hebrew Bible/Old Testament**

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 the 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.

**431 Muhammad and the Qur'an**

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

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.