Advanced Placement Policy

The unit given to students for advanced placement in psychology does not count towards the minimum psychology major or minor at Wellesley, but it does fulfill the PSYC 101 requirement. If an AP student with a score of 5 completes PSYC 101, she will receive the appropriate psychology credit, but will receive no AP credit.

Advanced-placement credit for statistics does not exempt students from or fulfill the PSYC 205 requirement. An AP student with a score of 5 in statistics must still take 205, but can receive AP credit.

Interdepartmental Majors

Students interested in an interdepartmental major in neuroscience or cognitive and linguistic sciences are referred to the section of the catalog where these programs are described. They should consult with the directors of the neuroscience or cognitive and linguistic sciences programs.

Quantitative Reasoning Program

Director/Senior Lecturer: *Taylor*

Lecturer: *Polito*

Advisory Committee: *Brabander (Geosciences), Ducas (Physics), Flynn (Chemistry), Genero (Psychology), Hawes (Education), Keane (Psychology), McGowan[A] (Philosophy), Shuchat (Mathematics), Stark (Physics), Swingle (Sociology), Wolfson (Chemistry)*

The ability to think clearly and critically about quantitative issues is imperative in contemporary society. Today, quantitative reasoning is required in virtually all academic fields, is used in most every profession, and is necessary for decision making in everyday life. The Quantitative Reasoning Program is designed to ensure that Wellesley College students are proficient in the use of mathematical, logical, and statistical problem-solving tools needed in today's increasingly quantitative world.

The Quantitative Reasoning Program provides a number of services to the academic community. It oversees the administration of the Quantitative Reasoning Assessment (described below) and staffs QR 140, the basic-skills course, and some overlay courses. The Program also provides tutorial support to students and instructors of quantitative reasoning overlay courses. Finally, the Quantitative Reasoning Program provides curricular support to faculty interested in modifying existing courses or designing new ones so that these courses will satisfy the overlay component of the quantitative reasoning requirement.

The Quantitative Reasoning Requirement

All students must satisfy both components of the quantitative reasoning requirement: the basic-skills component and the overlay course component. The basic-skills component is satisfied either by passing the Quantitative Reasoning Assessment given during Orientation or by passing QR 140, the basic-skills course that builds mathematical skills in the context of real-world applications. Students are required to satisfy the basic skills component in their first year so that they may enroll in the many courses for which basic quantitative skills (including algebra, geometry, basic probability and statistics, graph theory, estimation, and mathematical modeling) are a prerequisite.

The overlay component is satisfied by passing a quantitative reasoning overlay course or by scoring a 5 on the AP Statistics exam. Quantitative reasoning overlay courses emphasize statistical analysis and interpretation of data in a specific discipline. The Committee on Curriculum and Academic Policy has designated specific courses in fields from across the curriculum as ones that satisfy the quantitative reasoning overlay requirement. These courses (listed below) may also be used to satisfy a distribution requirement. See the Statistics section of the catalog for more information about some of these quantitative reasoning overlay courses.

QR 140 Introduction to Quantitative Reasoning
Polito, Taylor

In this course, students develop and apply mathematical, logical, and statistical skills to solve problems in authentic contexts. The quantitative skills emphasized include algebra, geometry, probability, statistics, estimation, and mathematical modeling. Throughout the course, these skills are used to solve real world problems, from personal finance to medical decision-making. A student passing this course satisfies the basic skills component of the quantitative reasoning requirement. This course is required for students who do not pass the Quantitative Reasoning Assessment. Those who pass the assessment, but still want to enroll in this course must receive permission of the instructor.

Prerequisite: Permission of the instructor required for students with a score of 9.5 or above on the Quantitative Reasoning Assessment.
Distribution: None
Semester: Fall, Spring   Unit: 1.0

QR 180 Statistical Analysis of Education Issues
Taylor

What factors explain individual and group differences in student achievement test scores and educational attainment? Do inequities in financing public elementary and secondary schools matter in terms of student achievement and future employment? This course explores the theories, statistical methods, and data used by social scientists and education researchers in examining these and other education issues. Students collect, analyze, interpret, and present quantitative data. They begin with descriptive statistics and work up to inferential statistics, including hypothesis testing and regression analyses.

Prerequisites: Fulfillment of the basic skills component of the Quantitative Reasoning requirement. Not open to students who have taken or are taking ECON 103/SOC 190, MATH 101, MATH 101Z, POL 199, or PSYC 205.
Distribution: Social and Behavioral Analysis. Fulfills the Quantitative Reasoning overlay course requirement.
Semester: Spring   Unit: 1.0

Overlay Course Component

The following courses satisfy the overlay course component of the quantitative reasoning requirement. *In order to register for a course on this list, a student must first satisfy the basic skills component of the quantitative reasoning requirement by passing either the quantitative reasoning assessment or QR 140.*

Note that this list is subject to change. Check individual department listings for information about when each course is offered.

[ASTR 109] Our Place in Space and Time

ASTR 206 Astronomical Techniques with Laboratory

BISC 109 Human Biology with Laboratory

BISC 111 Introductory Organismal Biology with Laboratory

[BISC 111DL] Introductory Organismal Biology Discussion with Laboratory

BISC 111T Introductory Organismal Biology with Laboratory (Tropical Island)

BISC 198 Statistics in the Biosciences

BISC 201 Ecology with Laboratory

CHEM 120 Intensive Introductory Chemistry with Laboratory

CHEM 205 Chemical Analysis and Equilibrium with Laboratory

CHEM 232 Physical Chemistry for the Life Sciences with Laboratory

CHEM 233 Physical Chemistry I with Laboratory

CHEM 361 Analytical Chemistry with Laboratory

ECON 103/SOC 190 Introduction to Probability and Statistical Methods

[ES 100] Humans and Nature

ES 101 Introduction to Environmental Studies with Laboratory: Methods and Analysis

GEOS 101 Earth Processes and the Environment with Laboratory

GEOS 102 The Dynamic Earth with Laboratory

MATH 101 Reasoning with Data: Elementary Applied Statistics

MATH 101Z Reasoning with Data: Elementary Applied Statistics with Health Applications

MATH 220 Probability and Elementary Statistics

PHIL 209 Scientific Reasoning

PHYS 202 Introduction to Quantum Mechanics and Thermodynamics with Laboratory

POL 199 Introduction to Research Methods in Political Science

PSYC 205 Statistics

PSYC 305 Seminar. Advanced Statistical Methods and SPSS

QR 180 Statistical Analysis of Education Issues

SOC 190/ECON 103 Introduction to Probability and Statistical Methods

Department of Religion

Professor: *Elkins, Geller, Hobbs, Kodera (Chair), Marini, Marlow*

Assistant Professor: *Silver*

Religious belief and practice have played an essential role in creating and challenging personal identity and societal norms since the dawn of human history. The study of religion is therefore a constituting element of humanistic inquiry. The Religion Department pursues that inquiry through the critical interpretation of religious traditions, offering courses by scholars trained in Buddhism and the traditions of East Asia, Hebrew Bible and the Ancient Near East, New Testament and Earliest Christianity, Judaism, Catholic and Protestant Christianity, and Islam. Students may also study of religions of Africa, South America, and South Asia in cognate programs and departments.

The Religion Department's courses employ a wide range of critical methods for interpreting these traditions including historical, literary, social, comparative, and cultural studies as well as moral and metaphysical reflection. The intellectual breadth and depth of Religion Studies has helped to prepare our graduates for many careers including business, law, medicine, public service, and teaching as well as ministry.

Goals for the Major

Students who elect a major in Religion will acquire these competencies and skills:

• Substantial knowledge of one of the great religious traditions or a central theme in two or more traditions.

• Close reading and interpretation of sacred texts and religious writings, including their specialized rhetoric, forms, and contexts.

• Significant mastery of critical methods used in contemporary scholarship on religion.

REL 104 Study of the Hebrew Bible/ Old Testament
Silver
Critical introduction to the Hebrew Bible/Old Testament, studying its role in the history and culture of ancient Israel and its relationship to ancient Near Eastern cultures. Special focus on the fundamental techniques of literary, historical, and source criticism in modern scholarship, with emphasis on the Bible's literary structure and compositional evolution.

Prerequisite: None
Distribution: Historical Studies or Religion, Ethics, and Moral Philosophy
Semester: Fall   Unit: 1.0

REL 105 Study of the New Testament
Hobbs
The writings of the New Testament as diverse expressions of early Christianity. Close reading of the texts, with particular emphasis upon the Gospels and the letters of Paul. Treatment of the literary, theological, and historical dimensions of the Christian scriptures, as well as of methods of interpretation. The beginnings of the break between the Jesus movement and Judaism will be specially considered.

Prerequisite: None
Distribution: Historical Studies or Religion, Ethics, and Moral Philosophy
Semester: Fall, Spring   Unit: 1.0

REL 106 Children of Abraham
Geller
An exploration of key facets of Judaism, Christianity, and Islam with attention to elements of change, continuity, and diversity within these evolving traditions. Consideration of the relationships among the Abrahamic traditions in historical and comparative perspectives. Topics may include origins, scripture, revelation, structure, institutions, holy men and women, sacred cities, pilgrimage, law, and fundamentalism.

Prerequisite: None
Distribution: Religion, Ethics, and Moral Philosophy
Semester: Fall   Unit: 1.0

REL 108 Introduction to Asian Religions
Kodera
An introduction to the major religions of India, Tibet, China, and Japan with particular attention to universal questions such as how to overcome the human predicament, how to perceive ultimate reality, and what is the meaning of death and the end of the world. Materials taken from Islam, Hinduism, Buddhism, Confucianism, Taoism, and Shinto. Comparisons made, when appropriate, with Hebrew and Christian Scriptures. *Normally alternates with REL 109.*

Prerequisite: None. Not open to students who have taken REL 109.
Distribution: Religion, Ethics, and Moral Philosophy
Semester: Fall   Unit: 1.0

REL 109 Religions of the Silk Road
Marlow
NOT OFFERED IN 2010-11. An introduction to the major religious communities and traditions of East, South and West Asia, with particular attention to their contacts and interactions as facilitated by trade, travel and pilgrimage from antiquity until roughly the fifteenth century. The framework for our study of these religious cultures will be the "Silk Road," which stretched from Eastern China to the Mediterranean Sea and linked together the many communities that thrived across Eurasia throughout the preindustrial era. In addition to Buddhism and Islam, the course will cover Confucianism, Daoism, Jainism, Hinduism and Zoroastrianism, as well as Manichaeanism and Nestorian Christianity. Readings are drawn from foundational sacred texts, and the accounts of merchants, travelers and pilgrims. Additional attention to the material cultures and artistic works produced by the religious communities of the Silk Road. *Normally alternates with REL 108.*

Prerequisite: None. Not open to students who have taken REL 108.
Distribution: Religion, Ethics, and Moral Philosophy
Semester: N/O   Unit: 1.0

REL 114 Seminar. Science and the Bible
Silver
Discussion of controversies over the Bible and its relevance to scientific inquiry. Examination of significant areas of perceived conflict between science and religion such as: evolutionary theory, geological history, environmental stewardship, neuro-scientific models of the mind, and genetic engineering. We will ask how religious believers have drawn upon the Bible to develop critical perspectives toward aspects of the scientific project, and we will assess the benefits and limitations of using ancient texts in this way.

Prerequisite: None. Open to first-year students only.
Distribution: Religion, Ethics, and Moral Philosophy
Semester: Fall   Unit: 1.0