



REL 3160: RELIGION AND SCIENCE

Fall 2024

Tues 5-6th (11:45-12:40) and Thurs 6th (12:50-1:40)

Room: Matherly 105

Instructor: Anna Peterson

Office: 105 Anderson (Mailbox in 107 Anderson)

E-mail: annap@ufl.edu

Tel.: 352-273-2936; fax 392-7395

Office hours: Tues. and Thurs. 4th period (10:40-11:30) and by appointment

Description

The interactions between religion and science are complex, varied, sometimes conflictual and sometimes complementary. In this class, we will survey a range of issues, thinkers, and approaches to some of the most important ways in which religion and science interact, primarily but not exclusively in the West. The course will not assume a conflict between religion and science, nor will we assume that either science or religion is unitary or homogeneous. Rather, we will explore the diversity in both scientific and religious ways of thinking as well as the commonalities, interactions, and disagreements between scientific and religious approaches to a variety of issues.

We will address a variety of topics, including historical perspectives on the relations between religion and science; scientific and religious theories about the origins of life, particularly evolution by natural selection; and contemporary issues such as bioethics and environmental problems.

Assignments will include short essays and a final project, as well as frequent small group work and classroom activities.

For information about this class's General Education requirements and Student Learning Objectives, and a copy of the rubric and grading scale, please see the end of this document.

Required Books

1. Gary B. Ferngren, ed., *Science and Religion: A Historical Introduction*, 2nd ed. (Johns Hopkins University Press, 2017).
2. Aaron Mackler, *Introduction to Jewish and Catholic Bioethics: A Comparative Analysis* (Georgetown, 2003).

Additional Required Readings (Available on the Canvas site or online)

Gad Freudenthal, "From Arabic to Hebrew: The Reception of the Greco-Arab Sciences in Hebrew." In *A History of Jewish-Muslim Relations: From the Origins to the Present Day*, ed. Abdelwahab Meddeb and Benjamin Stora (Princeton University Press, 2013)

Scribner, Robert W. "The Reformation, Popular Magic, and the 'Disenchantment of the World.'" *The Journal of Interdisciplinary History*, vol. 23, no. 3, 1993, pp. 475–94.

Carolyn Merchant, *The Death of Nature*, Ch. 9-10

[Darwin, *On the Origin of Species*, Ch. 3-4](#)

Amos Yong, "Mind and Life, Religion and Science: His Holiness the Dalai Lama and the Buddhism-Christianity-Science Dialogue." *Buddhist-Christian Studies*. 28 (2008): 43-63.

Kathleen Garces-Foley, "Buddhism, Hospice, and the American Way of Dying." *Review of Religious Research* 44, No. 4 (June 2003): 341-353.

Aasim I. Padela, "Muslim Perspectives on the American Healthcare System: The Discursive Framing of 'Islamic' Bioethical Discourse." *Die Welt des Islams* 55, Issue 3/4 (2015): 413-447.

Writing and Attendance Requirements

This class meets the university writing requirement with 4000 words of graded, out of class writing. This requirement will be met with two essays, which will be evaluated on the basis of content, organization, and writing mechanics and flow. Please see the essay rubric at the end of this syllabus for details of evaluation criteria.

1. *Attendance and participation* in class discussions, including timely and close reading of all assigned texts. There will be five unannounced reading quizzes, which will account for 10% of the final grade.
2. *Short essay* (min. 2000 words), on historical perspectives. Due Sunday, Oct. 6 by midnight (via Canvas). 40% of final grade

3. *Short essay* (min 2000 words), on evolution and/or bioethics. Due Sunday, Nov. 24 by midnight (via Canvas). 40% of final grade.

4. *Modular debate and reflection paper*. On Tuesday, Dec. 3, we will have a modular debate in class on a topic that we will choose in class on Nov. 21. A paper reflecting on your research and participation in the debate will be due on Sunday, Dec. 8. Participation in the debate will be graded P/F. If you do not participate in the debate, you may not hand in the reflection paper, which will count for 10% of your final grade.

Making Up Work

Work is due as specified in the syllabus. Late work is subject to a 1/3 grade penalty for each 24 hour period it is late (e.g., a paper that would've earned an A if turned in in class on Monday becomes an A- if received Tuesday, a B+ if received Wednesday, etc, with the weekend counting as two days). To be excused from submitting work at the assigned time, you must give 24 hours advance notice and/or meet the UF standards for an excused absence.

Students Requiring Accommodations

Students with disabilities requesting accommodation should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing UF's standard [online evaluations](#) as well as a course-specific evaluation that focuses on course content and the experience of the Quest curriculum. Class time will be allocated for the completion of both evaluations.

Class Demeanor

Students are expected to arrive to class on time, stay the full class period, and behave in a manner that is respectful to the instructor and to fellow students. Electronic devices should be turned off and placed in closed bags. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be kept to a minimum.

Materials and Supplies Fees

There are no additional fees for this course planned, other than possible costs for producing a poster for the final research fair. Poster costs would be shared among group members and should be under \$5/person.

Counseling and Wellness Center

For counseling services, contact the [Counseling and Wellness Center](#), 352-392-1575.

Writing Studio

The Writing Studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio [online](#) or in 302 Tigert Hall for one-on-one consultations and workshops.

Academic Honesty

UF students are bound by The Honor Pledge, which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the [Honor Code](#). On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code specifies behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.

Plagiarism is defined in the University of Florida's Student Honor Code as follows: "A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes (but is not limited to) (a) quoting oral or written materials, whether published or unpublished, without proper attribution, and (b) submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student." In other words, you may not copy verbatim a sentence or paragraph of text from the work of another author without proper citation and quotation marks, nor may you paraphrase or restate in your own words text or ideas written by someone else without proper citation.

ChatGPT and similar AI programs pose new and complicated ethical challenges for students and instructors. UF has some [guidelines and information](#) that can help you understand what might be acceptable uses of ChatGPT. It is never acceptable to submit written work that you did not create. Using and copying verbatim a sentence or paragraph of text from ChatGPT or any other AI software for any kind of course assignments will constitute plagiarism in this class and will be subject to the same disciplinary procedures. I am happy to talk about how you (and we) might use these programs for good, e.g. in creating outlines.

I will check references if I have any questions about authorship, and I may ask for notes, outlines, and other supporting material to demonstrate that you researched and wrote an assignment yourself. **Please keep dated copies of your outline, notes, and rough drafts and be ready to submit them in case questions arise about the authenticity of your work.**

If you do not have convincing evidence that you authored the work yourself, I will start the [honor code process](#). Students found guilty of academic misconduct will be prosecuted in accordance with the procedures specified in the UF honesty policy. In addition, proven plagiarism on any assignment will automatically result in a grade of "E" for this class.

Resources for Students

1. *Accommodation for Disabilities*: Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide

documentation to the student, who must then provide this documentation to the Instructor when requesting accommodation.

2. *Counseling Resources*: Resources available on-campus for students include the following:
- a. University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling;
 - b. Student Mental Health, Student Health Care Center, 392-1171, personal counseling;
 - c. Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling;
 - d. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

3. *Software Use*: All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

4. *Writing assistance*: the College of Liberal Arts and Sciences has a writing studio, located in Turlington Hall, which offers individual tutoring and assistance with writing. For more information and to make appointments, see <https://writing.ufl.edu/writing-studio/>

Schedule

**** PLEASE NOTE:** There may be changes in dates and assignments. Students will be informed of any changes via Canvas announcements. Please make sure you check the site regularly and that you receive email notifications when announcements are posted. ******

DATE	TOPIC	ASSIGNMENTS
<u>I. Introduction to the class</u>		
Th 8/22	Introduction to the class	
Tu 8/27	Conflict or complexity?	Ferngren, Ch 1
<u>II Historical Perspectives: Ancient to Medieval</u>		
Th 8/29	Greece	Ferngren, Ch. 2 (Aristotle)
Tu 9/3	Early Christianity	Ferngren, Ch. 3
Th 9/5	Judaism	Freudenthal, "From Arabic to Hebrew." Guest lecturer: Dr. Yaniv Feller
Tu 9/10	Engineering the Renaissance	Guest lecturer: Prof. Mark Law (Zoom)
Th 9/12	Islam and Science	Ferngren, Ch. 5 Guest Lecturer: Dr. Chris Furlow

T 9/17	Medieval Christianity	Ferngren, Ch. 4
Th 9/19	The Reformation and magic	Scribner, "The Reformation, Popular Magic, and the 'Disenchantment of the World'"

III. Early Modernity and the Scientific Revolution

Tu 9/24	Copernicus and Galileo	Ferngren, Ch. 6 and 7
Th. 9/26	Protestantism and the Scientific Revolution	Ferngren, Ch. 8
Tu 10/1	Newton	Ferngren, Ch. 9
Th 10/3	Critiques of the scientific revolution	Merchant, <i>The Death of Nature</i> , Ch. 9-10

**** First paper due Sunday Oct. 6 by midnight ****

IV. Religious Responses to evolutionary theory

T 10/8	Darwin <i>On The Origin of Species</i>	Ferngren, Ch. 13 <i>On the Origin of Species</i> , Ch. 3-4
Th 10/10	Evolution	Ferngren, Ch. 14
T 10/15	Evangelicalism and Fundamentalism The Scopes Trial	Ferngren, Ch. 18 Ferngren, Ch. 19
Th 10/17	Catholicism and evolution	Ferngren, Ch. 15
T 10/22	Asian Traditions	Ferngren, Ch. 21 Yong, "Mind and Life, Religion and Science"
Th 10/24	Judaism and evolution	Ferngren, Ch. 20

V. Contemporary Ethical Issues

T 10/29	Introduction to Bioethics	Mackler, Ch. 1-2
Th. 10/31	Euthanasia and end of life	Mackler, Ch. 3
T 11/5	Euthanasia and end of life	Mackler, Ch. 4 Garces-Foley, "Buddhism..."
Th 11/7	Abortion and reproduction	Mackler, Ch. 5-6

Th 11/12 Contemporary debates: IVF TBD
Th 11/14 Contemporary debates: abortion TBD
T 11/19 Health care reform Mackler, Ch. 7
Padela, "Muslim Perspectives"

Th 11/21 Choose topic and groups for modular debate

***** Second essay due Sunday, Nov. 24 by midnight ****

T 11/26-Th 11/28 Thanksgiving, no class

Over Thanksgiving break, please read:
Cary Thigpen et al., "[On the Intersection of Science and Religion.](#)"

T 12/3 Modular debate

***** Reflection paper on modular debate due Sunday, Dec. 8 *****

GENERAL EDUCATION DESCRIPTION AND STUDENT LEARNING OUTCOMES

Primary General Education Designation: Humanities (H)

Writing Requirement: 4000 words

A minimum grade of C is required for general education credit. Courses intended to satisfy the general education requirement cannot be taken S-U

HUMANITIES DESCRIPTION

Humanities courses provide instruction in the history, key themes, principles, terminology, and theory or methodologies used within a humanities discipline or the humanities in general. Students will learn to identify and to analyze the key elements, biases and influences that shape thought. These courses emphasize clear and effective analysis and approach issues and problems from multiple perspectives. Full description of General Education objectives [here](#).

HUMANITIES SLOs

Full description of SLOs [here](#).

Content: Identify, describe, and explain the history, underlying theory and methodologies used. In this course, students will learn about the theories, and methodologies used in studying the relations between religion and science. Students will study the historical development and current uses of different religious and philosophical theories about science. They will read and discuss major theories, thinkers, and issues in this field, learning to understand key arguments and the relations among them.

Critical Thinking: Identify and analyze key elements, biases and influences that shape thought within the subject area. Approach issues and problems within the discipline from multiple perspectives. In this class, students will study important factors affecting the ways people think about scientific issues. They will learn to analyze arguments and scholarly conversations in complex and critical ways.

Communication: Communicate knowledge, thoughts and reasoning clearly and effectively. Students in this class will learn to communicate what they have learned clearly and effectively, in writing and orally. The class will strengthen students' ability to write and talk about moral and philosophical claims in clear, accurate, and comprehensive ways.

WRITING REQUIREMENT

This course confers 4000 words towards the Writing Requirement (WR), which ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning. While helping students meet the broad learning outcomes of content, communication, and critical thinking, the instructor will evaluate and provide feedback on students' written assignments with respect to grammar, punctuation, clarity, coherence, and organization.

Course grades have two components. To receive Writing Requirement credit, a student must

receive a grade of C or higher and a satisfactory completion of the writing component of the course.

The writing requirement for this course will be fulfilled by the two short essays. Through writing and revising the papers, and participating in peer review, students will learn to organize their arguments with an appropriate thesis statement, detailed outline, adequate and relevant support for arguments, and clear and correct writing style. In writing assignments, students demonstrate skills in framing arguments, developing plans (outlines), identifying appropriate and accurate support for arguments, and introducing and concluding papers in persuasive and clear ways.

Students will receive feedback from the instructor on the final papers, including comments and suggestions on both content and writing, within 2 weeks of submitting the final papers. This feedback will address content, organization and coherence, argument and support, style, clarity, grammar, punctuation, and other mechanics. The rubric that I use for evaluating all written work is attached at end of syllabus, along with the grading scale. In addition, I will provide specific guidelines for individual assignments closer to the time each is due.

In addition to the feedback from the instructor and the peer review, I encourage you to seek help from the university's Writing Studio (www.writing.ufl.edu), which offers support for writing in all fields and can be very helpful both in developing your first drafts and in polishing those drafts.

I recommend the Chicago manual of style (<https://www.chicagomanualofstyle.org/home.html>) as a guide for writing format and style. However, if you are used to following a different style guide, that is acceptable, as long as you check with me first and make sure to use the same format consistently throughout your paper.

Please see rubrics and grading scale at the end of this syllabus.

	Excellent	Good	Needs Improvement	Unacceptable	Points (of 100)
Thesis	A clear statement of the main conclusion of the paper. 5 points	The thesis is obvious, but there is no single clear statement of it. 4 points	The thesis is present, but must be uncovered or reconstructed from the text of the paper. 1- 3 points	There is no thesis. 0 points	5 points
Exposition	<ul style="list-style-type: none"> • The paper contains accurate and precise summarization, description and/or paraphrasing of the issue being discussed • Key concepts and theories are accurately and completely explained • When appropriate, good, clear examples are used to illuminate concepts and issues and/or support arguments. • The paper uses appropriate textual support. 32-35 points	<ul style="list-style-type: none"> • The summarization, description and/or paraphrasing of the issue is fairly accurate and precise. • Key concepts and theories are explained. • Examples are clear, but may not be well chosen. • The paper has textual support, but other passages may have been better choices. 29-31 points	<ul style="list-style-type: none"> • The summarization, description and/or paraphrasing of the issue is fairly accurate, but not precise. • Key concepts and theories are not explained. • Examples are not clear, and may not be well chosen or appropriate. • The textual support is inappropriate. 26-28 points	<ul style="list-style-type: none"> • The summarization, description and/or paraphrasing of the issue is inaccurate. • Key concepts and theories may be identified but are not explained. • Examples are not clear, are inappropriate, and/or do not illuminate concepts and issues. • No textual support. 0-25 points	35 points

Evaluation	<p>The paper presents an original argument regarding a position on an issue of ethical import. This argument is supported by:</p> <ul style="list-style-type: none"> • checking for support in the argument • checking for the argument’s internal consistency • considering objections to one’s own argument. This involves presenting 1 or more plausible and appropriate objections, and responding to them thoroughly. <p>32-35 points</p>	<p>The paper presents an original argument regarding a position on an issue of ethical import. This argument is supported by:</p> <ul style="list-style-type: none"> • checking for support in the argument • checking for the argument’s internal consistency • considering objections to one’s own argument, though the objections may be ill chosen and/or not thoroughly responded to. <p>29-31 points</p>	<p>The paper presents an original argument but describes and/or considers its plausibility in a weak or superficial way. It does not check for the support offered in the argument or the argument’s internal consistency. It does not defend the central argument against plausible objections.</p> <p>26-28 points</p>	<p>The paper does not present an original argument about the issues in question, or, it fails to offer support through rational argument.</p> <p>0-25 points</p>	35 points
Writing: Mechanics	<ul style="list-style-type: none"> • All sentences are complete and grammatical. • Paper has been spell-checked and proofread, and has no errors, and no rhetorical questions or slang. <p>9-10 points</p>	<ul style="list-style-type: none"> • All sentences are complete and grammatical. • Paper has been spell-checked and proofread, and has very few errors, and no rhetorical questions or slang. <p>7-8 points</p>	<ul style="list-style-type: none"> • A few sentences are incomplete and/or ungrammatical. • Paper has several spelling errors, rhetorical questions and/or uses of slang. <p>5-6 point</p>	<ul style="list-style-type: none"> • Many sentences are incomplete and/or ungrammatical. • Paper has many spelling errors, rhetorical questions and/or uses of slang. <p>0-4 points</p>	10 points

<p>Writing: Flow and Coherence</p>	<ul style="list-style-type: none"> • All words are chosen for their precise meanings and are used consistently. • All of the content of the paper is relevant to the main line of argument; no extraneous material. • Ideas are developed in a natural order. Premises fit together naturally and it is easy to identify the main line of argument and to understand what is being said. • All new or unusual terms are well-defined. • Information is accurate. <p>14-15 points</p>	<ul style="list-style-type: none"> • Most words are chosen for their precise meanings. • Most of the content of the paper is relevant to the main line of argument; extraneous material is at a minimum. • Ideas are mostly developed in a natural order. It is not hard to understand what is being said. • Most new or unusual terms are well-defined. • Information (names, facts, etc.) is accurate. <p>12-13 points</p>	<ul style="list-style-type: none"> • Words are not chosen for their precise meanings. • May be substantial extraneous material. • Ideas are not always developed in a natural order. It is sometimes difficult to identify the line of argument or to understand what is being said. • New or unusual terms are not well-defined. • Information (names, facts, etc.) is mostly accurate. <p>9-11 points</p>	<ul style="list-style-type: none"> • Words are not chosen for their precise meanings. • Substantial extraneous material. • Ideas are not developed in a natural order. Premises do not fit together naturally and it is difficult to identify the line of argument or to understand what is being said. • New or unusual terms are not defined. • Information (names, facts, etc.) is inaccurate. <p>0-8 points</p>	<p>15 points</p>
---	---	---	--	--	------------------

Grading Scale for Course

A	4.0	94-100
A-	3.67	90-93
B+	3.33	87-89
B	3.0	84-86
B-	2.67	80-83
C+	2.33	77-79
C	2.0	74-76
C-	1.67	70-73
D+	1.33	67-69
D	1.0	64-66
D-	0.67	60-63
E	0.0	0-59