

**REL 3160: RELIGION AND SCIENCE**  
**Spring 2014: M, W, F 9:35-10:25am**  
**Matherly 105**

Instructor: Sarah Werner

Office: 119 Anderson (Mailbox in 107 Anderson)

Tel. 352-392-1625

E-mail: sarah.werner@ufl.edu

Office Hours: Mondays and Wednesdays 10:30-12:00 and by appointment

**Description**

The relations 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 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.

The course will be divided into three sections. The first and longest will offer a historical overview of key issues in Western thinking about and experiences of religion and science, including pre-modern and modern periods. The second section of the course will address scientific and religious theories about the origins of life, including evolution by natural selection, religious responses to evolutionary thought, and different secular and religious adaptations of evolutionary theory. The third section will examine several contemporary issues related to religion and science, including bioethics, environmental problems, and the implications of science for religious studies theory.

The course readings are mainly by religious studies scholars, philosophers, and scientists, offering a diverse set of well-written, authoritative, and sometimes controversial approaches to the topic. Assignments will require students to read critically, evaluate and compare different perspectives, and write well-informed and well-argued essays. This class does not require any previous training in religious studies or in the specific topics addressed. However, as an intermediate level course, it will include intensive reading and writing, including critical analysis of complex materials and issues.

**Objectives and Goals**

1. To become familiar with diverse approaches to the study of religion and science, including those that assume conflict, integration, and separation between the two fields;
2. To learn about and discuss the relations between religion and specific scientific themes, including evolution, cognitive neuroscience, cosmology, and scientific method;
3. To improve students' ability to discuss and analyze theoretical claims and supporting arguments; and
4. To improve students' ability to express, in writing and orally, their own analytical arguments.

5. To learn the history, underlying theory and methodologies used to analyze the relations between religion and science, as an interdisciplinary field of study drawing on natural and physical sciences, religious studies, and philosophy;
6. To identify and analyze key elements, biases and influences that shape scholarly thinking about religion and science, from both scientific and humanistic perspectives;
7. To approach these issues from diverse disciplinary and theoretical perspectives; and
8. To communicate the information and analysis developed in this course in a clear, organized, and effective way in written work and in class discussions.

**Prerequisite:** “sophomore standing”

**Requirements**

1. Attendance and participation in class discussions, including punctual and close reading of all assigned texts (10% of final grade).

2. Short in-class presentation of a story from the news relating to science and religion. Students will sign up during the first week of class for an assigned date. (5% of total grade).

2. Essay (500-800 words) on the history of Western religious and philosophical thinking about science (25%)--Due week 5 of class

3. Essay (500-800 words) on religion and evolutionary thought (25%)—Due week 8 of class

5. Final paper (2000 words) on a contemporary issue in religion and science. Topic must be approved by instructor. A rough draft will be due two weeks before the final paper is due. You will receive comments on the draft by the instructor and through peer review within a week. The final paper will be due the week before classes end. (35% total for rough draft, and final draft).

More detailed instructions for each assignment, including the peer review process for the final paper, will be provided before each paper is due.

**Grading Scale**

A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D+	67-69
D	64-66
D-	60-63
F	Below 60

## **Policies, Rules, and Resources**

1. *Handing in Assignments:* All assignments should be submitted via e-mail (sent to sarah.werner@ufl.edu) in the form of a Word Document attachment unless otherwise announced by the instructor. Assignments will be returned via e-mail as well.
2. *Late or Make-Up Assignments:* You may take an exam early or receive an extension on an exam or essay assignment *only* in extraordinary circumstances *and* with prior approval from the instructor. If an extension is not granted, the assignment will be marked down ½ grade (e.g., from B+ to B) for each day late.
3. *Completion of All Assignments:* You must complete all written and oral assignments and fulfill the requirement for class participation in order to pass the course. I will not average a grade that is missing any assignment or requirement.
4. *Attendance and Participation:* Class attendance is required. Do not register for this class if you cannot arrive on time. Students should arrive on time and prepared to discuss the day's readings. Tardiness harms your understanding of the material and disrupts the class. After the first late arrival, the instructor reserves the right to mark you absent. The instructor will *not* provide notes or discuss material that has already been covered for students who arrive late, barring extraordinary circumstances (which do not include failing to find a parking place or sleeping in).
5. *Common Courtesy:* Cell phones and other electronic devices must be turned off during class. Students who receive or make calls during class will be asked to leave. You may take notes on a laptop computer, although the instructor reserves the right to ask you to turn off the computer if circumstances warrant. The instructor also reserves the right to ask any student engaging in disruptive behavior (e.g., whispering, reading a newspaper) to leave the class. If that occurs, the student will be marked absent for the day.
6. *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 university specifically prohibits cheating, plagiarism, misrepresentation, bribery, conspiracy, and fabrication. For more information about the definition of these terms and other aspects of the Honesty Guidelines, see <http://www.chem.ufl.edu/~itl/honor.html>. Any student(s) demonstrated to have cheated, plagiarized, or otherwise violated the Honor Code in *any assignment* for this course will fail the course. In addition, violations of the Academic Honesty Guidelines shall result in judicial action and the sanctions listed in paragraph XI of the Student Conduct Code.
7. *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. Please tell the instructor and teaching assistant at the beginning of

the semester if you have a disability that requires accommodation (e.g., longer time for exams, note-takers, etc.).

8. *Counseling Resources*: Resources available on-campus for students include the following:

- University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling;
- Student Mental Health, Student Health Care Center, 392-1171, personal counseling;
- Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling;
- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

9. *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.

10. *Writing Assistance*: In addition to scheduling time with the instructor, students are highly encouraged to seek assistance from the University Reading and Writing Center (<http://www.at.ufl.edu/rwcenter/index.html>). For additional assistance, I recommend Joshua Sowin's "A Guide to Writing Well" (<http://www.fireandknowledge.org/archives/2007/01/08/a-guide-to-writing-well/>). The University of Wisconsin-Madison Writing Center is also a valuable resource, especially for basic citation information: (<http://www.writing.wisc.edu/>).

### **Required Books**

1. Gary B. Ferngren, ed., *Science and Religion: A Historical Introduction* (Johns Hopkins University Press, 2002), ISBN 9780801870385
2. Mary Midgley, *Evolution as a Religion: Strange Hopes and Stranger Fears* (Routledge, 2002), ISBN 9780415278331
3. Edward O. Wilson, *The Creation: An Appeal to Save Life on Earth* (WW Norton Press, 2007) ISBN 0393330486

### **Articles and chapters (avail. on e-learning)**

1. Francis Collins, *The Language of God* (Free Press, 2006), Chapter 5 ("Deciphering God's Instruction Book: The Lessons of the Human Genome", p109-144).
2. Charles Darwin, *The Origin of Species* (Pocket Books, 2008), Chapter 3 ("Struggle for Existence") and Chapter 4 ("Natural Selection; or The Survival of the Fittest")
3. Richard Dawkins, *The God Delusion* (First Mariner Books, 2008), Chapter 4 ("Why There Almost Certainly is No God", p 137-189)
4. Stuart A. Kauffman, *Reinventing the Sacred* (Basic Books, 2008), Chapter 1 ("Beyond Reductionism", p 1-9), Chapter 2 ("Reductionism", p 10-18), Chapter 4 ("The

Nonreducibility of Biology to Physics”, p 31-43) and Chapter 19 (“God and Reinventing the Sacred”, p 281-288)

5. Nathan Schneider, “What Happens to Religion When It Is Biologized?” *Science and Spirit* (May-June 2008): 44-49.

### Schedule

\*\* PLEASE NOTE: There may be changes in dates and assignments as the semester proceeds. Students will be informed of any changes and will be responsible for having assignments completed by the updated due dates.

<b>DATES</b>	<b>TOPIC</b>	<b>ASSIGNMENTS</b>
<b>WEEK 1</b>		
Mon Jan 6	Introduction to the class	
Wed Jan 8	Science and Religion in Media	
Fri Jan 10	Conflict or complexity?	Chapters 1-2 in Ferngren
<b>WEEK 2</b>		
Mon Jan 13	Greece & early Christianity	Chapters 3-5 in Ferngren
Wed Jan 15	Islam	Chapter 6 in Ferngren
Fri Jan 17	Scientific Revolution	Chapters 7-10 in Ferngren
<b>WEEK 3</b>		
Mon Jan 20	NO CLASS—Martin Luther King Holiday	
Wed Jan 22	Scientific Revolution II	Chapters 11-13 in Ferngren
Fri Jan 24	Disussion	TBA
<b>WEEK 4</b>		
Mon Jan 27	Natural history and evolution	Chapters 14-16 in Ferngren
Wed Jan 29	Natural history and evolution	Chapters 17-18 in Ferngren
Fri Jan 31	Discussion	TBA
<b>WEEK 5</b>		
Mon Feb 3	Darwin	Ch 3-4 in <i>On the Origin of Species</i> *
Wed Feb 5	Darwin—viewing of <i>Creation</i>	

Fri Feb 7 First Essay due at 4pm via email

**WEEK 6**

Mon Feb 10 Religious responses to Darwin Chapters 19-20 in Ferngren

Wed Feb 12 Religious responses to Darwin II Chapters 21-22 in Ferngren

Fri Feb 14 Discussion TBA

**WEEK 7**

Mon Feb 17 Evolution as religion Midgley, Chapters 1-6

Wed Feb 19 Evolution as religion Midgley, Chapters 7-9

Fri Feb 21 Discussion TBA

**WEEK 8**

Mon Feb 24 Evolution as religion Midgley, Chapters 10-14

Wed Feb 26 Evolution as religion Midgley, Chapters 15-18

Fri Feb 28 Second Essay due at 4pm via email

\* SPRING BREAK Week of March 1 – no class \*

**WEEK 9**

Mon Mar 10 Religion and the Environment Wilson, Chapters 1-7

Wed Mar 12 Religion and the Environment Wilson, Chapters 8-10

Fri Mar 14 Discussion TBA

**WEEK 10**

Mon Mar 17 Religion and the Environment Wilson, Chapters 11-13

Wed Mar 19 Religion and the Environment Wilson, Chapters 14-17

Fri Mar 21 Discussion TBA

**WEEK 11**

Mon Mar 24 Current issues Chapter 23-26 in Ferngren

Wed Mar 26 Current issues Chapters 27-30 in Ferngren

Fri Mar 28	Discussion	TBA
<b>WEEK 12</b>		
Mon Mar 31	Evol Biology and Religion	Schneider, “What Happens?”*
Wed Apr 2	Cognitive Theory of Religion	Tremlin, Intro and Chapters 1-4
Fri Apr 4	Discussion	TBA
<b>WEEK 13</b>		
Mon Apr 7	Stem cells and bioethics	Peters
Wed Apr 9	Science, animals and ethics	Sunstein & Nussbaum
Fri Apr 11	*Peer editing session—First draft of Final Paper due April 11 in class (bring printed copy)*	
<b>WEEK 14</b>		
Mon Apr 14	Science and Atheism	Dawkins, chpt 4*, Collins, chpt 5*
Wed Apr 16	Religion and Radical Environmentalism	
Fri Apr 18	Discussion	TBA
<b>WEEK 15</b>		
Mon Apr 21	Future of religion and science?	Kauffman, chpt 1,2, 4, 19*
Wed Apr 23	Course Wrap-up	
*Final Paper due Wednesday April 23, by 4pm via e-mail*		