

PHIL 3040 – SCIENCE and RELIGION
Spring, 2022
Tuesdays & Thursdays, 10:50am-12:05pm

Instructor: Karen deVries, Ph.D.

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I typically respond to emails on weekdays and within 24 hours of receipt.

Office Hours: Columbine 4056; Thursdays, 2-3:30 and by appointment (email me)

COURSE DESCRIPTION

What is the relationship between science and religion? Are they inherently in conflict? This course explores these questions using an interdisciplinary set of fields including Religious Studies, Science and Technology Studies, the History of Science, Philosophy, and the Life Sciences.

The course is divided into four segments. It begins with a survey of the dynamic histories of the **concepts of science and religion** and some of their contested landscapes. From there, we'll look at **changing cosmologies** and the emergence of modern physics, astrophysics, and observational science in the 17th century. This section will include materials on Copernicus, Galileo, Newton, and Einstein. For the third segment, we'll look at different ideas about the **origin of life**. Here we'll learn about Natural Theology and the emergence of Darwinian and evolutionary theory. This section concludes with an exploration of ideas about creationism and intelligent design. The final segment explores different religious and scientific understandings of **climate change**.

COURSE LEARNING OBJECTIVES

In this course, students will:

- Develop an understanding of the historical, social, and theoretical context and debates that have shaped major fields of inquiry around “religion and science”
- Develop a basic working knowledge of three areas of science: physics/astrophysics, evolutionary biology, and climate science and the issues each of these raises for religion
- Be challenged with difficult, theoretical, and counterintuitive materials thereby strengthening their critical thinking skills and testing the limits of existing knowledge
- Use evidence to communicate clearly, effectively, and judiciously about discourse on religion and science
- Improve their ability to synthesize and critically evaluate complex theoretical arguments
- Develop critical reading, writing, and thinking skills

REQUIRED TEXTS

- (1) *Territories of Science and Religion* by Peter Harrison. University of Chicago Press, 2007.
- (2) *An Introduction to Science and Technology Studies* by Sergio Sismondo. Wiley-Blackwell, 2009.
- (3) *The Reluctant Mr. Darwin: An Intimate Portrait of Charles Darwin and the Making of His Theory of Evolution* by David Quammen. W.W. Norton and Company, 2007.
- ~~(4) *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* by Robin Wall Kimmerer. Milkweed Editions, 2013.~~
- (5) *Gospel of Climate Skepticism: Why Evangelical Christians Oppose Action on Climate Change*, by Robin Veldman. University of California Press, 2019.
- (6) Additional articles will be available on Canvas

EVALUATION CRITERIA and GRADES

Course Assignments

- 25% Participation and Attendance
- 25% Reading Responses
- 25% Midterm Paper
- 25% Final Paper

Grading Scale

A	100-95	C+	79-77
A-	94-90	C	76-74
B+	89-87	C-	73-70
B	86-84	D	60-69
B-	83-80	F	60-0

** For your final grade, I round up to the nearest tenth of a percent. If you finish with an 89.5, that is rounded up to an A-, but if you finish with an 89.499999999999, that is still a B+*

Absences and Late Work Late assignments will be accepted without deduction only on *sufficient prior* arrangement with me. Please get in touch with me as soon as practicably possible if you know that you might be late with an assignment. If you have not made arrangements because of the suddenness of the emergency, let me know as soon as possible include an authorized note from a professional who is familiar with your situation (e.g. a doctor).

Participation/Attendance (25% of grade)

Participation is a major component of this class, but how you participate is largely up to you. Attendance, in-class discussions, group discussions, contributions to Canvas discussions, and correspondence with me will all be factored into your participation grade. Attendance is a major component of your participation grade. If you're not in class, you can't participate.

Reading Responses (25% of grade)

Several times throughout the semester, I will post a reading response questions to Canvas. These assignments are not meant to be difficult but will show me that you are doing the readings in depth while also creating an ongoing written record of your engagement with the course texts. This record will be a resource for you when you write your papers.

Midterm Paper (25% of grade) and Final Paper (25% of grade)

For your midterm paper, I will give you a prompt that will address material from the first half of the semester. For your final paper, I will give you a prompt that will address the last half of the semester. Both of these papers will have a 5-7 pages length requirement.

Both papers will require you to have developed and to demonstrate your critical thinking skills about the materials we've covered. They will not require outside research or reading beyond the weekly assignments.

Writing is a skill that not only enables good communication but also helps to organize your thoughts. Thinking and writing are both lifelong disciplines that can always be improved. UCCS's Writing Center has great resources to help you with your papers and with your overall writing skills. The sooner you get in touch with them, the better.

Syllabus Changes

I reserve the right to make changes to this syllabus as appropriate. Should this happen, I will inform you as soon as possible.

TECHNOLOGY REQUIREMENTS

Students are expected to have access to a working computer and the internet during the course.

Minimal technical skills required include:

- use Canvas, UCCS's learning management system,
- use emails (and sometimes with attachments) to communicate with instructor,
- create and submit files in .doc, .docx, and .pdf formats
- copy and paste assignment questions, and
- download and install software.

ACADEMIC and TECHNOLOGY HELP

Excel Centers

The Excel Centers (Communication, Languages, Mathematics, Science, and Writing) continue to provide students with outstanding academic support both in-person and remotely. All Excel Centers offer online service appointments. For details, students should visit the Excel Support webpage: <https://excel.uccs.edu/excel-support>

Academic Advising

UCCS Academic advising offers advising for degree programs and an opportunity to ask questions about all things regarding your academic career. For more information, see <https://advising.uccs.edu/>

Technology Help

UCCS Help Desk – 719-255-3536. See also <https://oit.uccs.edu/get-help>

For Canvas issues, you can access technical help through the Help link at the bottom of the global navigation in the Canvas course (black nav bar at the far left of the window). You can also call the Canvas Support Hotline at 844-802-9230. Alternatively, you can access Canvas's Support via Live Chat at <https://uccs.edu/lms/>

ADDITIONAL UCCS POLICIES and RESOURCES

Campus COVID-19 Information

All students are expected to wear face coverings while inside all UCCS buildings/facilities. Guidance and exceptions to wearing a face covering can be read in the full executive order (which you can access on the UCCS policy page <https://vcaf.uccs.edu/policies/uccs/policies> under "Executive Directives"). Students may be asked to leave the class if they are not wearing a face covering and additional disciplinary action may result in accordance with the Student Code of Conduct.

Please do not walk into the Wellness Center if you are experiencing any COVID like symptoms. Appointments for telehealth visits and follow up testing can be scheduled by calling 719-255-4444. Email wellness@uccs.edu with any immunization or attestation questions. Additional information on UCCS and COVID can be found at <https://covid19.uccs.edu/>

If you become ill with COVID-19 (or any other serious illness) during the semester, please let me know as soon as possible. I will work with you to determine the best way to help you complete your assignments and the course. Please let me know as soon as possible.

Plagiarism

Read the UCCS LAS Plagiarism Policy which you can find here: <https://las.uccs.edu/plagiarism-policy>

Paraphrasing or quoting another's work without citing the source is a form of academic misconduct. Even inadvertent or unintentional misuse or appropriation of another's work (such as relying heavily on source material that is not expressly acknowledged) is considered plagiarism. All work for this course must be completed by the person submitting it for evaluation.

Anyone found guilty of plagiarism, cheating, forgery, falsification, or other forms of academic dishonesty will FAIL the course.

If you have any questions about using and citing sources, you are expected to ask for clarification. You plagiarize, you fail. Seriously. When in doubt, just ask me. I am here to help!

Resources for Avoiding Plagiarism

https://academics.uccs.edu/~srehorst/labs/Modules/Plagiarism_Guidelines.pdf

<http://www.indiana.edu/~istd/definition.html>

<http://tutorials.istudy.psu.edu/academicintegrity/>

Recording Classes

Students are prohibited from making audio or video recording of any class activity conducted in person or online unless (1) I have given you explicit permission or (2) the student has provided the instructor with a Faculty Accommodation Letter from Disability Services. These letters must be presented to the instructor prior to any recording done and recording should be reserved for that individual's educational use only. Students who are permitted to record are prohibited from distributing recordings without consent. Distribution without consent will be forwarded to the Dean of Students for consideration under the student code of conduct. Recording class activity without consent is a violation of instructor and student right to privacy, copyright, and intellectual property.

Disabilities Services

If you are a student with a disability and believe you will need accommodations for this class, please register with Disability Services and provide them with documentation of your disability. They will work with you to determine what accommodations are appropriate for your situation. To avoid any delay, you should contact Disability Services as soon as possible. Please note that accommodations are not retroactive and disability accommodations cannot be provided until a Faculty Accommodation Letter has been given to me. Please contact Disability Services for more information at Main Hall room 105, 719-255-3354 or dservice@uccs.edu.

Student Code of Conduct

UCCS expects all students to conduct themselves as honest, responsible and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff and the public to use, enjoy and participate in the University programs and facilities. For additional information, see UCCS's Student Conduct Code at:

<https://www.uccs.edu/dos/student-conduct>

Student Educational Records. All records related to this course are confidential and will not be shared with anyone, including parents, without a signed, written release. If you wish to have information from your records shared with others, you must provide written request/authorization to the office/department. Before giving such authorization, you should understand the purpose of the release and to whom and for how long the information is authorized for release.

Military Deployment and Military Service

In order to assist students who are called to active duty, the Campus has compiled a set of guidelines that include information on withdrawing from courses. General information can be accessed at: <https://www.uccs.edu/military/current-students/active-duty-and-reservists/deployment>

COURSE CALENDAR

WEEK 1	INTRODUCTION
Tuesday January 18	Review syllabus and expectations.
Thursday January 20	Stephen J. Gould's "Non-Overlapping Magisteria" (Canvas) Preface and Chapter 1 of <i>Territories of Science and Religion</i> (21pp)
WEEK 2	RELIGION, SCIENCE, and HISTORY
Tuesday January 25	Chapter 2 of <i>Territories of Science and Religion</i> (34pp) "The Cosmos and the Religious Quest"
Thursday January 27	Chapters 3 of <i>Territories of Science and Religion</i> (28pp) "Signs and Causes"
WEEK 3	RELIGION, SCIENCE, and HISTORY cont.
Tuesday February 1	Chapter 4 of <i>Territories of Science and Religion</i> (34pp) "Science and the Origins of 'Religion'"
Thursday February 3	Chapter 5 of <i>Territories of Science and Religion</i> (28pp) "Utility and Progress"
WEEK 4	RELIGION, SCIENCE, & HISTORY cont.
Tuesday February 8	Chapter 6 and Epilogue of <i>Territories of Science and Religion</i> (55pp) "Professing Science"
Thursday February 10	Sujit Sivasundaram's "A Global History of Science and Religion" from <i>Science and Religion: New Historical Perspectives</i> (Canvas) (21pp)
WEEK 5	KNOWLEDGE and SCIENCE STUDIES
Tuesday February 15	Preface & Chapters 1-2 from <i>Intro to Science and Technology Studies</i> (25pp) "Prehistory of STS" and "The Kuhnian Revolution"
Thursday February 17	Chapter 3 & 4 from <i>Introduction to Science and Technology Studies</i> (24pp) "Questioning Functionalism" and "Stratification and Discrimination"

WEEK 6 KNOWLEDGE and SCIENCE STUDIES cont.

**Tuesday
February 22** *Class will NOT meet today. A pre-recorded lecture will be available.*
Chapters 5&6 from *Introduction to Science and Technology Studies* (24pp)
“The Strong Program” and “Social Construction”

**Thursday
February 24** *Class will NOT meet today. A pre-recorded lecture and required discussion question will be available on Canvas.*
Chapters 7&8 from *Introduction to Science and Technology Studies* (21pp)
“Feminist Epistemologies” and “Actor-Network Theory”

WEEK 7 KNOWLEDGE and SCIENCE STUDIES cont.

**Tuesday
March 1** ~~Bruno Latour’s “Thou Shall Not Freeze-Frame” from *On the Modern Cult of the Factish Gods* (Canvas) (25pp)~~

CATCHING UP

**Thursday
March 3** ~~Chapter 1, “Historical Landmarks” from Alister McGrath’s *Science and Religion* (25pp)~~

WEEK 8 CATCHING UP

**Tuesday
March 8** Bruno Latour’s “Thou Shall Not Freeze-Frame” from *On the Modern Cult of the Factish Gods* (Canvas) (25pp)

**Receive midterm prompt by end of day today.
Midterm is due by 11:59 on Tuesday, March 29**

**Thursday
March 10** Chapter 1, “Historical Landmarks” from Alister McGrath’s *Science and Religion* (25pp)
Maurice Finocchiaro’s “Myth 8. That Galileo Was Imprisoned and Tortured for Advocating Copernicanism” from *Galileo Goes to Jail and Other Myths about Science and Religion* (Canvas) (10pp)

of interest but not required:
Galileo’s “Letter to Archduchess Cristina” (Canvas) (10pp)

WEEK 9 MODERN COSMOLOGIES

Tuesday Sir Isaac Newton’s “General Scholium” (Canvas) (4pp)
March 15 Edward Davis’s “Myth 13. That Isaac Newton’s Mechanistic Cosmology
Eliminated the Need for God” from *Galileo Goes to Jail and Other Myths
about Science and Religion* (Canvas) (8pp)

of interest but not required:

Stephen Snobelen’s “God of Gods, and Lord of Lords’: The Theology of Isaac
Newton’s General Scholium to the Principia” (Canvas) (41pp)

Thursday Albert Einstein’s *New York Times* article, “Science and Religion” (Canvas)
March 17 Matthew Stanley’s “Myth 21. That Einstein Believed in a Personal God” from
Galileo Goes to Jail and Other Myths about Science and Religion
(Canvas) (9pp)

of interest but not required:

Chapter 3, “Does God Act in Nature?” from *Science and Religion: A Very
Short Introduction*. (21pp)

Noah Efron and Menachem Fisch’s “Astronomical Exegesis: An Early Modern
Jewish Interpretation of the Heavens” (Canvas) (16pp)

WEEK 10 SPRING BREAK

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WEEK 11 LIFE and OTHER ORIGIN STORIES

Tuesday No class today.
March 29 **Work on your midterm, which is due today by 11:59pm**

Thursday Chapters 1 & 2 from the Book of Genesis (Canvas)
March 31 pp. 1-51 from *The Reluctant Mr. Darwin* (51pp)

of interest but not required:

Selections from Paley’s *Natural Theology* (Canvas)

WEEK 12 LIFE and OTHER ORIGIN STORIES continued

Tuesday pp. 52-152 from David Quammen’s *The Reluctant Mr. Darwin* (100pp)
April 5

Thursday pp. 153-253 from David Quammen’s *The Reluctant Mr. Darwin*
April 7

WEEK 13	LIFE and OTHER ORIGIN STORIES cont.
Tuesday April 12	Susan Harding's "Fundamentalist Exile" (Canvas) (21pp) Watch up to 1 hour and 45 minutes of "Bill Nye Debates Ken Hamm" video from February 4, 2014 (Canvas)
Thursday April 14	excerpts from Eugene Scott's "Creation Science Lite" from <i>Scientists Confront Intelligent Design</i> (Canvas) <u>of interest but not required:</u> Stephen J. Gould's "Defending NOMA from Both Sides Now" from <i>Rocks of Ages: Science and Religion in the Fullness of Life</i> (Canvas)
WEEK 14	CLIMATE CHANGE, CLIMATE SKEPTICISM
Tuesday April 19	Evan Berry's <i>Immanent Frame</i> review of Robin Veldman's <i>The Gospel of Climate Skepticism</i> , "Social Climates Beyond Belief and Doubt" Read the following from Robin Veldman's <i>The Gospel of Climate Skepticism</i> Excerpts from Intro: pp. 1-12 and bottom of pp. 16-20 (16pp) Chapter 1 & 2 (43pp) Receive final paper prompt by end of this week. Final paper is due by 11:59 on Wednesday, May 11th
Thursday April 21	Chapters 4 & 5 from Robin Veldman's <i>Gospel of Climate Skepticism</i> (45pp)
WEEK 15	CLIMATE CHANGE, CLIMATE SKEPTICISM cont.
Tuesday April 26	Chapter 7 from Robin Veldman's <i>The Gospel of Climate Skepticism</i> (29pp)
Thursday April 28	Chapter 8 & Epilogue from Robin Veldman's <i>The Gospel of Climate Skepticism</i> (31pp)
WEEK 16	DEAD WEEK
Tuesday May 3	Conclusions, Summations, and Future Directions
Thursday May 5	No class today. Work on your final paper.
FINALS WEEK	Final Paper due by 11:59pm on Wednesday, May 11th

