

WRIT 3302: Science, Religion, and the Search for Human Nature

Tu/Th, 12:45 - 2 pm
 Folwell Hall 108
 3 credits
 Spring 2008
 Class #90329
 Section 1

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Course Description

Is religion opposed to science? Was the universe created? Does evolution rule out God's existence? Should scientists stop "playing God"? Can religions help build a sustainable world? These are some of the many questions we will ask in this course, which explores the complex relationship that science and religion have had in Western culture. Together we will examine several prominent historical and contemporary methods and theories of science, as well as their implications for the concepts of God and human nature. We will discuss such subjects as language and metaphor, miracles and falsification, creation and evolution, genetic engineering and human dignity, and cosmology and environmental ethics, and our readings will include provocative new work by such thinkers as Francis Collins, Lee Silver, and Gary Gardner. We will also listen to some popular music about these issues, see a wide range of video clips, and watch a full-length feature film. This course fulfills the liberal education requirements for "Other Humanities Core."

Course web site: <https://moodle.umn.edu/>

Class time: 50% lecture, 50% discussion

Work load: 75 pages reading per week, 15 pages writing per term, 2 papers, 4 quizzes, 4 short reading responses

Grade: 40% reports/papers, 40% quizzes, 10% attendance, 10% reflection papers

Objectives

What questions will the course help you to answer? How will you grow in knowledge and understanding? What intellectual abilities will the course help you to develop?

By the end of this course, you should be able to:

- recognize and understand basic facts and concepts concerning the relationship of science and religion and the place of human beings in the universe
- collaborate with others to increase your knowledge and understanding of these facts and concepts
- identify and make connections between the methods and theories of theology and the methods and theories of the biological, cosmological, and ecological sciences
- analyze and evaluate competing explanations of the origin of life and the character of human and nonhuman nature
- communicate your ideas effectively in writing and in speaking

Texts

What reading materials will help you to pursue the goals of this course?

There are four required textbooks for this course:

- Barbour, Ian G. When Science Meets Religion: Enemies, Strangers, or Partners? New York: HarperOne, 2000. ISBN: 0-06-060381-X. \$16.95.
- Collins, Francis S. The Language of God: A Scientist Presents Evidence for Belief. New York: Free Press, 2007. ISBN: 1-4165-4274-4. \$15.00.
- Silver, Lee M. Challenging Nature: The Clash Between Biotechnology and Spirituality. New York: Harper Perennial, 2007. ISBN: 0-06-058268-5. \$15.95.
- Gardner, Gary T. Inspiring Progress: Religions' Contributions to Sustainable Development. New York: W. W. Norton, 2006. ISBN: 0-393-32832-5. \$14.95.

We will also be reading a number of articles, which will be available on our course web site, listed above.

Grades

How will I evaluate the nature, quality, and progress of your learning?

I will award grades in this course according to the University of Minnesota's Uniform Grading Policy:

A: achievement that is outstanding relative to the level necessary to meet course requirements

B: achievement that is significantly above the level necessary to meet course requirements

C: achievement that meets the course requirements in every respect

D: achievement that is worthy of credit even though it fails to meet fully the course requirements

F: represents failure and signifies that the work was either:

- completed but at a level of achievement that is not worthy of credit, or
- not completed and there was no agreement between the instructor and the student that the student would be awarded an "I" (Incomplete)

I will also award pluses and minuses, with the highest possible grade being an "A."

An "I" (Incomplete) is assigned at the discretion of the instructor when, due to extraordinary circumstances, such as hospitalization, a student is prevented from completing the work of the course on time. An Incomplete requires a written agreement between instructor and student.

Students taking this course using the S/N option must complete all requirements, which will be graded using the A-F system. Students must earn a "C-" or better to receive an "S" (Satisfactory). Students earning a "D+" or worse will receive an "N" (No Credit).

Grades will be assigned in terms of a percentage of possible points according to the following standards:

	B+ \geq 87%	C+ \geq 77%	D+ \geq 67%		
A \geq 93%	B \geq 83%	C \geq 73%	D \geq 63%	F < 63%	
A- \geq 90%	B- \geq 80%	C- \geq 70%			

I may choose to grade more generously, but I will not raise my standards above these. If at any time you have concerns about your grade, please do not hesitate to contact me.

How to Calculate Your Grade

You can calculate your grade at any time by adding up all the points you received on your assignments to date and dividing that number by all the points you could have received on those assignments. (Grades for attendance and participation will not be calculated until the end of the semester.)

Credits and Workload Expectations

This three-credit course will require, for the average University of Minnesota undergraduate student, nine hours of academic work per week, averaged over the term, in order to complete the work of the course. Since the course meets for three hours a week, you should expect to spend an additional six hours a week on coursework outside the classroom. All grades are based on the quality of the work submitted, not on hours of effort.

Student Academic Success Services

University Counseling & Consulting Services (UCCS) offers learning support services, including classes, workshops, individual consultation and counseling, and study skills resources to help you be successful at the University. They have two Twin Cities campus locations: Minneapolis (109 Eddy Hall) and St. Paul (199 Coffey Hall). Phone: 612-624-3323. Web: <<http://www.uccs.umn.edu/>>.

A Word About Quizzes and Exams

I don't give quizzes and exams that ask you to "guess what the professor is thinking." Instead, I give quizzes and exams that attempt to evaluate the nature, progress, and quality of your learning. Yes, sometimes this involves asking you to identify, name, or define important facts, concepts, and ideas, but these will always be things we have read about or discussed, and I do this because developing a full understanding of our subject requires building a firm base of knowledge. At other times, I will ask you more probing "why" and "how" questions, which will allow you to demonstrate your understanding more thoroughly, and I may also ask you to apply your understanding to particular situations, or to analyze, synthesize, and evaluate evidence and conclusions, all of which involve the kind of higher-order intellectual activities that this course attempts to help you develop.

University Policies

What University policies apply to this course so that you will have a safe, productive, and fair environment for learning?

Sexual Harassment

Sexual harassment by or toward a member of the University community is prohibited by Board of Regents policy. Complaints about sexual harassment should be reported to the University's Office of Equal Opportunity and Affirmative Action, 419 Morrill Hall.

Classroom Conduct

All students at the University have the right to a civil, productive, and stimulating learning environment. In turn, instructors have a responsibility to nurture and maintain such an environment. Lively, even heated, discussion is not disruptive behavior. Both instructors and students have a fundamental obligation to respect the rights of each other and an equally fundamental obligation to respect the instructional setting as a place for civil, courteous behavior. Students who disrupt the educational process because of discourteous, threatening, harassing, or other aggressive behavior will be removed from class.

Accommodations for Students with Disabilities

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. If you have a disability, please contact me and/or Disability Services (180 McNamara Alumni Center, [612] 626-1333 TTY/voice) to schedule an appointment with a Specialist. All requests will remain confidential. This syllabus is available in alternative formats upon request.

Student Academic Integrity and Scholastic Dishonesty

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own can result in disciplinary action. Any student found guilty of scholastic dishonesty in this course can be assigned a penalty up to and including an "F" or "N" for the course and be reported to the University's Office for Student Academic Integrity. If you have any questions regarding the expectations for a specific assignment or exam, please ask.

Requirements

What will you be doing to pursue the goals of this course?

To succeed in this course, you must complete the following requirements, which are worth a total of 1,000 possible points. For more information on this point system, see the section on grades.

1. Attendance and Participation (100 points)

Learning is social; it occurs in community. As a result, you will need to participate actively in this course on several levels, so that all of us can learn as much as possible from one another.

More than two unexcused absences will seriously affect your grade in this portion of the course, and a pattern of unexcused absences is cause for a grade of "F" or "N" in the entire course. If you know in advance that you are going to be absent on a particular day, please let me know. You are also responsible for documenting the legitimacy of any absence. Legitimate reasons for absence include:

- illnesses certified by Boynton Health Service or your family physician
- emergencies caused by a death or serious illness in your immediate family
- participation in intercollegiate athletic events or other group activities sponsored by the University
- subpoenas, jury duty, military service, and religious observances

Our time in class is limited and therefore valuable. For this reason you should:

- arrive on time and stay the entire class period. Students who arrive late or leave early disrupt the flow of class and may miss important information. You should not expect to pass this course if you arrive late or leave early on a regular basis.

- turn off your cell phone, pager, and/or watch alarm before coming to class. It's very distracting when these go off during lectures and discussions.
- refrain from eating meals during class. You are welcome to bring a soda or light snack with you to class, but please be considerate of those around you.

In return, I will always begin and end class on time, will place any lecture notes online as soon as possible after the end of class, and will make myself available to answer your questions and discuss your concerns before and after class, whenever possible, in addition to during my office hours.

I will evaluate your class participation using the following scale:

- A: frequent and courteous participation, with mature and thoughtful insights
- B: above average participation and insight
- C: moderate participation and reasonable insight
- D: below average participation with little understanding of the issues
- F: little or no participation

Halfway through the semester, I will ask you to evaluate your own class participation using this scale, as well as identify what can you do to improve. At the end of the semester, I will ask you to evaluate yourself again, as well as indicate what have you done to improve since mid-semester. I will then take this final evaluation into account when assigning grades in this portion of the course.

To receive the full 100 points for attendance and participation, therefore, you should read the assigned texts carefully, attend the class meetings conscientiously, and participate actively in class discussions, small-group work, and other in-class assignments.

2. Papers (400 points)

To encourage you to think deeply and communicate effectively about the subject of this course, at two points during the semester I will ask you to submit a paper discussing one of our main course texts. Each paper will be worth 200 points, and specific assignments will be given out in class.

Length: Papers should be 4-5 pages long. This does not mean 3-1/2 pages long. It means at least four full pages, and possibly five.

Due dates and late papers: Papers are due at the beginning of class on the dates indicated on the schedule. If necessary, you may submit one of these papers late, but not both. Late papers submitted after more than one week, as well as second late papers, will have their grades reduced by ten percent for every class day they are late. Note that I cannot accept "computer problems" as an excuse for late papers. Please back-up your files and avoid waiting until the last minute to print your papers.

Submissions: Papers may not be submitted by email. You must bring a hard copy of your paper to class with you. I do, however, encourage you to print your papers on the reverse sides of previously used, recycled paper. Please keep a copy of each paper you write in case your original is somehow lost or destroyed.

Format: All papers must be typed, proofread, and spellchecked. The text should be double-spaced with one-inch margins and formatted in a standard-size font. Your pages should be numbered in the upper right-hand corner and stapled in the upper left-hand corner. Your name, the course number, my name, and the date should appear at the top left of the first page, and your title should be centered on the next line. Do not include a separate title page.

Documenting sources: If you quote from or refer to one or more of our course texts, lectures, or other outside readings in a paper, please cite them appropriately:

Within the body of your paper: Please indicate (a) the name of the author you are citing, (b) the title of the article or book the citation appears in, and (c) the page number on which it can be found. If you quote from or refer to a lecture from this course, simply place the word "lecture" in parentheses, followed by the date of the lecture, like so: (lecture, 9/25/07). Also, please do not drop quotations into your papers without providing context for them through the use of signal

phrases. Here is an example of a quotation introduced by a signal phrase and cited with a parenthetical page reference (notice that the period falls outside the parentheses):

According to Roderick Nash in *Wilderness and the American Mind*, “the first immigrants approached North America with a cluster of preconceived ideas about wilderness” (8).

In a bibliography: You do not need to include a bibliography unless you are citing a source other than the texts used in this course. If you cite outside sources, use the citation style with which you are most familiar (MLA, APA, or Chicago). Please do not mix styles or create your own citation method. To cite a web page in your bibliography, simply give enough information that I can (a) locate it, and (b) evaluate its quality. If you are citing a single web page, give its author and/or title (if available), the web address, and the date you accessed it. If you are citing an article that is part of a database, and the address is quite long, you need only provide the short form of the address (for example, <<http://www.cnn.com/>>).

Grading criteria: I will grade your papers according to the following criteria:

1. Content: Did you follow the assignment instructions? Have you read and understood the course material? Is your analysis insightful?
2. Coherence and clarity: Is your paper focused and well organized? Do you clearly state your purpose, explain how you will fulfill that purpose, and devote your paper to doing so? Do you support your claims with evidence and address opposing arguments?
3. Format, proof-reading, and documentation: Did you follow the formatting guidelines? Is your paper free of errors in grammar, punctuation, and spelling? Do you credit the source of borrowed ideas and statements appropriately?

The Center for Writing: The U of M Center for Writing <<http://writing.umn.edu/>> offers free, individualized writing instruction, both face-to-face and online.

3. Quizzes (400 points)

Over the course of the semester I will give four quizzes, which will consist of several identification and short answer questions based primarily on the readings from our textbooks and on my lectures. Each quiz will be worth 100 points, and partial credit will be given for partially correct answers. Quizzes will be given on the dates indicated on the schedule. Make-up quizzes will be given at my discretion and only if you can document the legitimacy of your absence.

4. Reading Responses (100 points)

Another important part of this course is the series of four reading responses you will write over the course of the term. These responses will allow you share your written thoughts with other students in the class, and they could also help you to develop one or more of your papers. Each reading response will be worth 25 points.

Logistics: At some point during each of the first four parts of the course, you should submit a reading response to the discussion forum on our Moodle site. Each response should be 300-600 words long (the equivalent of 1-2 printed pages) and should be a thoughtful, considered reaction to one of the texts or films in that part of the course. You must submit a response during each of the first four parts of the course. In other words, in part three you may not go back and submit a response for part one, nor may you wait until the end of the course to submit all four of your responses. Your four required reading responses should be based primarily on your own attention to and engagement with the texts and/or films. However, I also encourage you to engage the responses of other students by posting follow-up responses.

Grading: If you fulfill the assignment and write responses that meet basic standards of readability and coherence, you will automatically get a C (18 points) for each response. Then, at the end of the semester, I will assign extra credit (up to the maximum 100 points available for this assignment) to those students who exceed the required four postings, according to the following scale:

- A: frequent and courteous participation, with mature and thoughtful insights (full credit)
- B: above average participation and insight (some follow-up posts, some extra credit)
- C: moderate participation and reasonable insight (no follow-up posts, no extra credit)

Contact Me

How can you contact me to help you learn?

The best way to contact me is immediately after class; I would be happy to meet with you briefly to answer a question or elaborate on a point made in class. To contact me at other times, feel free to call me at my office, send me email, or stop by during my office hours. If my office hours are inconvenient for you, please let me know, and we can arrange to meet at another time. Even if you do not have a specific question, I encourage you to stop by my office at some point during the semester, so that I can get to know you better as a person and so that we can talk in more detail about the subjects that interest you. The main reason I am here is to help you learn and grow, so please take advantage of this opportunity and come see me. **My contact information appears at the top of this syllabus.**

Course Schedule

How is this course structured to develop your knowledge, understanding, and abilities throughout the semester?

This schedule is subject to change, so if you miss a class you should check with a classmate for the most current information. Lecture notes, handouts, and additional readings will be available on our web site.

1. Is religion opposed to science?

Tu 1/22 **Welcome**

Th 1/24 **How do science and religion relate to one another?**

Read: Barbour, Preface, Introduction

In class: "Faith and Reason" video; Joan Osborne, "One of Us" (audio)

Tu 1/29 **What is the early history of the science and religion dialogue?**

Read: Barbour, chap. 1; Galileo, "Letter to the Grand Duchess Christina" (read online, then print out and bring to class); John Paul II, "Faith Can Never Conflict with Reason" (optional)
In class: "Galileo's Battle for the Heavens" video; "Indigo Girls, "Galileo" (audio)

Th 1/31 **How do language and metaphor function in science and religion?**

Read: Schmidt, "The Functions of Language in Science and Religion"; Mac Cormack, "Metaphor in Science and Religion"

In class: Peter Mayer, "God is a River" (audio)

Tu 2/5 **Where do you fall on the spectrum of religious experience?**

Read: Collins, Introduction and chap. 1; Sam Harris, "An Atheist Manifesto"

In class: XTC, "Dear God" (audio)

Th 2/7 **Can miracles be falsified?**

Read: Collins, chap. 2; John Hick, "Miracles"

In class: Peter Mayer, "Holy Now" (audio)

2. Was the universe created?

Tu 2/12 **How do scientists think the universe began? (part one)**

In class: "The Universe: Beyond the Big Bang" video

QUIZ #1

Th 2/14 **How do scientists think the universe began? (part two)**

Read: Collins, chap. 3

Tu 2/19 **Does the universe show evidence of design?**

Read: Barbour, chap. 2; Dennis Overbye, "Laws of Nature, Source Unknown"

Th 2/21 **What are the implications of quantum physics?**
 Read: Barbour, chap. 3
 In class: Mid-term reflection; "Powers of Ten" and "Origins" videos

M 2/25 Film showing: Robert Zemeckis, <u>Contact</u> (PG; 1997; 153 min.) Time and location: 7-10 pm, Vincent Hall 16 (on Northrop Mall)
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Tu 2/26 **Is anybody out there?**
 In class: Discussion of Contact; Norman Greenbaum, "Spirit in the Sky" (audio)

3. Does evolution rule out God's existence?

Th 2/28 **What did Darwin say?**
 Read: Collins, chaps. 4-5
 In class: "Evolution: Darwin's Dangerous Idea" video

Tu 3/4 **What does Genesis say?**
 Read: Collins, chaps. 6-9; Genesis 1&2 (read online, then print out and bring to class)

Th 3/6 **What do "Intelligent Design" advocates say?**
 Read: "Intelligent Design" resources on web site
 In class: "Flock of Dodos" video

Tu 3/11 **What do scientists say about "Intelligent Design"?**
 QUIZ #2

Th 3/13 **Catch-up day**

Tu 3/18 **Spring Break**

Th 3/20 **Spring Break**

Tu 3/25 **Is evolution compatible with some forms of creationism?**
 Read: Barbour, chap. 4; Collins, chap. 10

Th 3/27 **What are the implications of evolution for bioethics?**
 Read: Collins, chap. 11, Appendix

4. Should scientists stop "playing God"?

Tu 4/1 **Is morality in our genes?**
 Read: Barbour, chap. 5; Nicholas Wade, "Is 'Do Unto Others' Written Into Our Genes?"
 In class: "The Question of God" video
 PAPER #1 DUE (on Collins)

Th 4/3 **Is the soul a fiction?**
 Read: Silver, Prologue and Part One
 In class: "Once and Again" video

Tu 4/8 **What is a human being?**
 Read: Silver, Part Two
 In class: "Life's Greatest Miracle" video

Th 4/10 **What's so great about nature?**
 Read: Silver, Part Three
 In class: Joni Mitchell, "Big Yellow Taxi" (audio)

Tu 4/15 **Will biotechnology save the world?**

Read: Silver, Part Four

In class: "Harvest of Fear" video

Th 4/17 **Will biotechnology remake us?**

Read: Silver, Part Five

In class: "Gattica" video

QUIZ #3

Tu 4/22 **Catch-up day**

5. Can religions help build a sustainable world?

Th 4/24 **What's so bad about progress?**

Read: Gardner, Introduction and Part One

In class: "Keeping the Earth" video; John Lennon, "Imagine" (audio)

Tu 4/29 **Is economics at odds with environmental sustainability?**

Read: Gardner, Part Two

In class: "Is God Green?" video

PAPER #2 DUE (on Silver)

Th 5/1 **Are we consuming ourselves to death?**

Read: Gardner, Part Three

In class: "The Story of Stuff" video

Tu 5/6 **Do we need a new environmental ethic?**

Read: Gardner, Part Four

QUIZ #4

Th 5/8 **Last class**

In class: Course evaluations; papers and quizzes returned