Science and Religion in the Western Tradition

Chris Mitsch

Official Course Summary

One of the distinctive features of Western culture involves the interaction of religion and reason as a basis for understanding. From the Ancient World up to modern times, systems of understanding have rooted themselves in both divine revelation and rational inquiry. This course will explore the origins of such perspectives, and trace their development and interaction from antiquity to the present. The course will focus on reading and evaluating texts which exemplify these modes of thinking from mythologies of the Ancient Near East, to Greek and Roman philosophical writings up to modern debates concerning the sufficiency of religion or science as a basis for understanding.

Role in Curriculum

This course may be counted toward fulfillment of the Science and Religion thread, and as a Writing Instructive course.

Major Goals

The goals for this course are wider in scope than is usual, owing to its varied roles in the curriculum. In short, I take the broader goal to be this: *learn how to use writing to explore new worlds*. For this course, the world you will be exploring is science and religion in the Western tradition. Broken down, I expect the following of you by the end of the term:

1. **Intellectual Virtues**: Understand doubt and confusion as an opportunity for growth and self-generated curiosity.
2. **Critical Thinking:** Learn how to use writing as a tool for sustaining curiosity and holding our judgmental thinking accountable.
3. **Research Skills:** Develop the research skills necessary for determining whether historical texts will shed light on a research question, and, if so, for identifying *which* historical texts should be investigated. Likewise for *parts* of historical texts.
4. **Appreciation for Historiography:** Appreciate the insidiousness of anachronism and other historical biases, and cultivate basic methods for minimizing them.

Grading

I will be grading you directly on your achievement of these goals. To demonstrate your achievement of them, you will be working on a paper throughout the term. While we will be generating the rubric I will use for grading, and you will be able to evaluate your progress using it throughout the term, your final grade in the course will be determined *exclusively* by your achievement of the course goals as presented in your paper. To be extra clear here: **you will not pass the course if you do not turn in a paper**. That said, I will be "buffering" your grade by making all of the scaffolding assignments—i.e., those leading up to the final paper—worth a small percentage of your grade. I will grade these on completion only (see note below on what "completion" means).

FINAL GRADE COMPONENT	% OF FINAL GRADE

INTELLECTUAL VIRTUES	20%
CRITICAL THINKING	20
RESEARCH SKILLS	20
APPRECIATION FOR HISTORIOGRAPHY	20
SCAFFOLDING WORK	20

Scaffolding Work

We will be doing *a lot* of scaffolding work in this class. There are two reasons why there is so much of this work. First, writing is hard. To achieve the goals of this course, you will need to learn a lot about thinking and researching. And for better or worse, learning requires a lot of practice. Second, writing is easy…to put off until the last moment. And then what happens? You cram, you turn in a paper that could have been much better, and everyone ends up unhappy (including your instructor). (Trust me, I have spent plenty of time on both ends of this procrastination‼) Part of the problem is, frankly, that most people are pretty bad at managing their time (myself included). But a bigger part of the problem, I think, is that people don't get to see writing *happen*—the things you read as students, or we read as citizens, are almost always "finished." We almost never get to see what's under the hood, so to speak.

This class tries to address these two problems. First, I will be hosting frequent, regular writing times each week. You are encouraged to come work on your writing during this time. And note that when I say "writing" here I mean *anything that contributes to a written product*. This includes reading, writing, editing, skimming a book or paper, thumbing through books, searching for scholarly literature, or even just sitting and thinking. If you're doing it with the goal of generating a written product, *it counts as writing*. (Ok, but note: don't trick yourself into procrastinating using things other than writing. A classic procrastination method for grad students is the ol' "But I need to read BLAH before I can start writing!" I'll be there to help catch this in y'all, but do be on the lookout: are you *really* doing it for writing, or are you just procrastinating?)

Second, I will be working on a paper—from scratch!—alongside you all. That means that I will be doing all of the scaffolding assignments with you. Thus, not only will you see "under the hood" of my writing, you can ask me questions about it *while I do it*. You'll also get the chance to critique the ideas and paper itself as they start to take shape!

A note: when I say I will grade your scaffolding work for "completion," I mean that I will be doing something like mastery grading. Basically, if the assignment you turn in is good enough to go onto the next stage in the writing process, I will mark it "complete"; if it is not, I will mark it "incomplete." If you receive an "incomplete" mark on an assignment, you will need to either a) revise and resubmit it or b) submit another assignment of that type. (For example, if you submit an argument diagram for a paper you've read, call it Paper 1, you could either a) redo the argument diagram for Paper 1 or b) find another paper, call it Paper 2, and submit an argument diagram for it.) For each stage, I will be requiring you to have a certain number of assignments marked "complete" before you can move on to the next stage.

(Since this is the first time I've taught any course this way, we will negotiate this number as we reach each stage.) This is to ensure both that you know what you're doing and that you're actually doing it.

All of your assignments will be turned in on Canvas. You will receive one of two grades for every scaffolding assignment: a "0" if it is incomplete and you need to try again, or a "1" if it is complete. You are in charge of keeping track what stage you are at in the writing process—after all, part of the goal of the course is for you to take control of your own learning!

Paper Requirements

I am not requiring any particular number of sources, length, word count, structure, grammar, etc. for your paper. This is because these are generally unhealthy ways of thinking about writing. A good paper is long enough and contains enough references to be persuasive—no more, no less. And a good paper has the structure and grammar it needs to make its thesis and argument clear. Thus, the "requirement" for the paper you will write is this: construct a clear and persuasive argument for a thesis contributing to scholarship on science and religion in the Western tradition. My job is to help you find the "right" length, structure, number of sources, grammar, etc., so if ever in doubt, come talk.

We will develop a rubric for your paper together. This will allow you to shape the expectations I have for your papers. More importantly, however, it will force you to reflect on what it means for you to achieve the course goals. This will not only help you succeed in this course, but it will help you develop the skills you need to be a better learner in the future.

Citizenship

The topics discussed by humanists are often considered sensitive and personal. This can make discussing them with others challenging. However, part of the goal of this course is to get better at communicating about these topics with others in a civil manner, instead of "agreeing to disagree" when things get tough.

In general, we will follow the rules below (adapted from Dr. Alison Reiheld's adaptation of Forni's *Choosing Civility*):

1. **Don't Interrupt.** Since we are online, this also means don't let your devices interrupt.
2. **Pay Attention and Listen.** *Paying attention* means considering the needs and expectations of others. For instance, consider: is now the right time for you to share your own view? *Listening* means both *hearing* what the other person is saying and *waiting* for them to say it. That means listening with the intention to understand the other person, but also avoiding guessing about what they are trying to say or why they are saying it. Aren't sure how someone wants to be heard? Ask! *Really* paying attention and listening to another person is hard work; if you don't feel exhausted when you're done, you may not be doing as good a job as you think.
3. **Speak Kindly and Don't Speak Ill.** Acknowledge that both what you say and how you say it have the power to hurt, and consider this before you speak. Also, don't speak ill of others, especially your classmates.
4. **Respect Others' Opinions**. Good people can disagree. Respecting others' opinions does not mean you have to give up your own. However, it does mean recognizing that others may look at the same world differently and that, in general, those different ways of looking at it deserve a fair hearing (in the appropriate setting).

5. **Accept and Give Constructive Criticism**. Humanists disagree on just about everything. Nevertheless, they largely get along well with one another. This is in large part because they criticize each other *constructively*. Giving constructive criticism means identifying what someone has done well while providing specific feedback on what can be improved and why it is currently a problem. Accepting constructive criticism means listening (see above) to criticism and asking questions when you don't understand.
6. **Do the Reading and Be Prepared.** Humanities classes are typically more about *process* than they are about *content*. As such, most of your learning comes through spontaneous interactions in the classroom. If you are not actively preparing for your own learning before class, not only will you be unprepared for these interactions, you will reduce the quality of interactions your classmates can have *even if they've adequately prepared*. Tl;dr, do the readings and write out comments and questions in advance—don't be like Socrates's interlocutors.

In addition to being civil, I expect everyone to participate regularly and equitably in class and group discussions. This means being a regular contributor to discussions but avoiding dominating them. In addition, I expect you to help others ensure that they meet their participation obligations. For example, if someone else has not been participating in your group discussion, try to include them. You could ask them what they think, but you could even just tell them you want to help but aren't sure how.

You will not be graded on citizenship in this course, but I nevertheless expect you to be a good citizen.

Tentative Schedule

In this class, we are focusing on writing as a tool for thinking, not merely as a means of communication (or, even less, as a means for me to evaluate you). This means that we will be spending a lot of time on writing; in fact, most of the course will be geared toward your writing, including what you read for the class and the assignments you do that engage directly with them.

You will also be expected to find and engage with readings that are *not* part of the regular course readings. The regular course readings are designed to give you a) an overview of the history, b) point you toward historical writing you may want to engage with for your paper, and c) teach you important lessons about how history is written (particularly, how to avoid common historical fallacies).

Unit	Reading and Content	Writing Sub-Goal

Course Introduction	• Syllabus • Course overview • Setting course policies	• N/A
Writing and Critical Thinking	• Syllabus • Mewburn et al., 122—133 • Harrell, *What is the argument?* Ch 1&2 • Great Courses: Science and Religion	• Identifying and diagramming arguments "in the wild" • How writing serves understanding
Western	• Birken, "What Is Western Civilization?" • Lindberg, Ch. 1 of *The Beginnings of Western Science* • Aechtner, "Teaching Warfare" • Henrich, Prelude and Ch 12 of *The WEIRDest People in the World*	• How to connect concepts and arguments • How to read academic writing • Identify an area of interest • Narrow down your topic
and	• Harrison, *The Territories of Science and Religion* Ch 1 • Harrison, Ch 2 • Harrison, Ch 3 • Harrison, Ch 4 • Harrison, Ch 5 • Harrison, Ch 6	• Identify features of good writing • How to skim with a purpose • Identifying good primary and secondary sources • Strategies for turning a topic into a thesis • Develop paper rubric
Science	• Cohen, *The Rise of Modern Science Explained* Ch 1 • Cohen, Ch 2 • Cohen, Ch 3 • Cohen, Ch 4 • Cohen, Ch 5 • Cohen, Ch 6 • Cohen, Epilogue	• Draft 1 • Writing critiques • Incorporate secondary literature • Reverse outline
Religion	• Nongbri, *Before Religion* Intro • Nongbri, Ch 1 • Nongbri, Ch 2 • Nongbri, Ch 3 • Nongbri, Ch 4 • Nongbri, Ch 5 • Nongbri, Ch 6 • Nongbri, Ch 7 • Nongbri, conclusion	• Draft 2 • Writing mechanics • Knowing your audience • Final draft • Reflection

Some may find it odd that we are not just combining all of these historical chronologies together by reading one, big chronological history of science and religion in the Western tradition and, instead, are reading *multiple* chronologies each focusing on a single aspect. This is for good reason (I think, at least). Here are four.

First, this encourages a healthier approach to building a big history narrative by tackling smaller problems, revising as needed, and *then* putting the pieces together. Thus, in a way, this is a kind of microcosm of historical work at-large.

Second, it better displays how our beliefs can shape what gets included in history. Part of the "point" for this course's structure is to show you how the official course summary is itself biased by our contemporary beliefs about science, religion, intellectual life, and the relationship among all of these. By putting these front and center, you will have the opportunity to learn some strategies for avoiding bias.

Third, it helps mitigate some of the problems with history-as-narrative. To my mind, the biggest problem with presenting history as a narrative is that it allows for lazy thinking about *why* things happened. By presenting multiple pictures of the history side-by-side, you are forced to think more carefully about the "whys" of history. This is a valuable, if humbling, lesson, and it is one that is often learned far too late by folks interested in history.

Fourth, this allows you to see several approaches to doing and writing history. Since a major part of the course is learning how to write, having multiple examples of writing gives us the opportunity to identify things that we find helpful as readers—say, the citation practices of Peter Harrison's book, the clear argument outlines of H. Floris Cohen's book, or the careful attention to historiography of Brent Nongbri's book—as well as things we find less helpful.