

# Understanding the Evolution Debate



Writing 20: Academic Writing  
Duke University Fall 2007  
<https://courses.duke.edu>



Section 14: MWF 8:45-9:35, Art Bldg 102  
Section 50: MWF 11:55-12:45, Art Bldg 102  
Section 53: MWF 1:30-2:20, Art Bldg 102

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Instructor: Dr. Robin Smith

Office: Art Building Rm 200-A

Office hours: MW 2:30-4pm and by appointment

Office phone: 660-7097

Email: [ras10@duke.edu](mailto:ras10@duke.edu)

Please note: I do most of my emailing during working hours (Mon.-Fri. 8am-5pm). If you send me an email during the weekend or after 5pm on a weekday I may not respond until the start of the next work day.

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## Course Structure and Objectives

“Evolution is at the foundation of communism, fascism, Freudianism, social darwinism, behaviorism, Kinseyism, materialism, atheism, and in the religious world, modernism and neo-orthodoxy.”

—Henry Morris, *Twilight of Evolution* (1963), p. 24

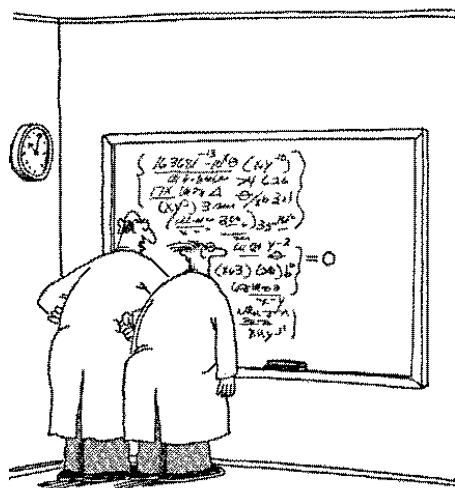
“Great is the power of steady misrepresentation — but the history of science shows how, fortunately, this power does not long endure.”

—Charles Darwin, *On the Origin of Species by Means of Natural Selection* (1859)

What's the big deal about evolution? In 1987, evolutionary biologist Stephen Jay Gould declared that the “creationism battle is over.” Recent events indicate that he was far from the truth, however. More than 80 years after the famous 1925 Scopes “Monkey” Trial, the debate between evolutionists and creationists continues to rage in science classrooms and in courtrooms across the country. Representatives from both sides of the debate are frequently accused of any number of ‘isms.’ Creationists, we are told, are guilty of anti-intellectualism, religious fundamentalism, and biblical literalism. Evolutionists, on the other hand, are frequently accused of elitism, moral relativism, and scientific materialism. At the heart of the debate lie tensions between traditional values and modernity, academic freedom vs. popular control over public education, the nature of science vs. religion, and the relationship between church and state. In this section of Writing 20, we will develop

strategies for academic writing through attempting to understand the evolution/creationism debate. Rather than weigh the evidence in favor of one faction or the other, our focus will be to develop a critical understanding of the underlying concerns motivating each side.

Philosopher Robert Pennock argues that the evolution/creationism debate has its roots in the intersection of three different sets of values: the religious values of Christianity, the ‘epistemic’ values of science (i.e., the way science acquires knowledge), and the political values that underpin public education (Pennock 345). In this course we will discuss each of these three themes in turn:



In Unit 1: “Science, Religion & Values,” we will explore a number of views on the relationship between science & religion. Are these two approaches to understanding the world friends, enemies or strangers? Are evolutionists immoral atheists? Does evolution imply that life is meaningless?

Then in Unit 2: “What Is Science, Anyway?” we will take a closer look at the nature and limits of science. Evolution, we are told, is ‘just a theory.’ But what is a scientific theory, anyway? And what does it mean to be “scientific”?

“No doubt about it, Ellington—we’ve mathematically expressed the purpose of the universe. Gad, how I love the thrill of scientific discovery!” -Gary Larson

## Intelligent Design Trial

A debate has arisen over a Pennsylvania school board's decision to teach both intelligent design and evolution in the classroom. Here are some highlights from the trial:

- Defense asks that scientific facts be stricken from record
- Beautiful painting of God creating universe with anvil and hammer admitted as evidence
- Defense appeals to jury's reason, fairness, and fear of eternal damnation
- Final deliberations interrupted twice by mailmen, first bearing kids' letters to Jesus, then bearing kids' letters to Darwin
- Monkey called as witness fails to identify anyone in courtroom as his descendant
- Darwin found guilty on all charges
- It is proven that this country is going to hell, but not for the reasons the intelligent-design supporters think

Finally, in Unit 3: “Evolution/Creationism in Our Courts and Classrooms,” we will examine the ways in which this debate has played out in our courts and public school system. A number of State Boards of Education have asked that evolution share “equal time” with creationism or have voted to remove evolution from the curriculum altogether. What are their reasons for doing so and how have the courts interpreted these challenges in light of the U.S. Constitution?

(*The Onion*, October 5, 2005)

As we explore the underlying themes of the debate, we will also examine common rhetorical strategies used by representatives from both sides. As we will see, though evolutionists and creationists draw on very different kinds of evidence and sources of authority in advancing and supporting their claims, they use a number of surprisingly similar rhetorical strategies.

### **What kinds of writing will we be doing in this course?**

The work of this course will revolve around two major writing projects. Your first major writing project, due halfway through the semester, will require you to apply what you have learned from our reading and discussion to a particular manifestation of the evolution/creationism debate from the popular media: the ‘bumper battle’ over the Christian fish symbol and its counter-symbol, a fish with feet. Building on many of the writing techniques you will learn in the first several weeks of the semester, you will write a critical essay based on the ‘fish wars.’ As the semester progresses, you will be asked to find and collect additional images (comic strips, editorial cartoons, bumper stickers, car decals, etc.) representing the debate as portrayed in the popular media and also to write a series of brief responses to the course readings which we will discuss in class. For your second major writing project, due at the end of the semester, I will ask you to choose one or more images from our class collection that you feel illustrate some tension at the heart of the evolution/creationism debate and to develop and extend your ideas in a longer project centered on an aspect of the debate that interests you.

### **Writing 20: Writing as a Process**

Although this is described as a writing course, it is also a course about *ideas*. I want you to think of writing as a tool for thinking. With that in mind, I am not as interested in helping you with grammar and sentence-structure or citation conventions (although we will touch on these as needed) as I am in helping you develop strategies for formulating, supporting, and articulating your ideas within our academic community. With this in mind, the writing assignments I’ve developed for this course are designed to help you develop these skills. While much of the reading and writing you do in this course will revolve around the nature of science and its relation to other disciplines, our focus won’t be on scientific writing per se but rather on academic writing in general. The goal of this course is to help you define your position in relation to what other people have said, and to make use of other people’s writing and ideas in order to advance your own.

Writing 20 is the only course at Duke taken by all undergraduates. While the many sections of Writing 20 focus on different themes and vary in the disciplines from which they draw, all sections of Writing 20 are united by a shared commitment to a common set of goals and practices. In particular, students in all sections of Writing 20 learn how to:

1. *Engage with the work of others.* In pursuing a line of inquiry or research, scholars need to identify and engage with what others have written about a text or issue. This academic move asks that writers read closely and attend to context, and that they make fair, generous, and assertive use of the work of others.

2. *Articulate a position.* The point of engaging with the work of others is to move beyond what has been said before. Scholars respond to gaps, inconsistencies, or complexities in the literature of their field and anticipate possible counterarguments in order to provide new evidence or interpretations that advance clear and interesting positions.

### **Writing 20: Writing as a Process (cont.)**

3. *Situate their writing within specific contexts.* In order to best contribute to their fields of inquiry, scholarly writers need to develop an awareness of the expectations and concerns of their intended readers. These expectations include not only appropriate and effective support for an argument, but also conventions of acknowledgement, citation, document design, and presentation of evidence.

The actual labor of producing a written academic argument usually involves taking a text through several drafts. In developing their work-in-progress, students in all sections of Writing 20 are offered practice in:

1. *Researching.* Students critically read scholarly work about their topics of interest. Depending on the field, this research may include locating sources, questioning methodology, examining evidence, identifying social or political contexts, or considering the implications of an academic work.
2. *Workshopping.* Academic writers re-read their own writing and share work-in-progress with colleagues in order to reconsider their arguments. Students learn how to become critical readers of their own prose through responding to one another in classroom workshops, seminar discussions, or conferences.
3. *Revising.* Students are asked to rethink their work-in-progress in ways that go beyond simply fixing errors or polishing sentences in order to extend, refine, and reshape what they have to say and how they say it.
4. *Editing.* As a final step in preparing documents for specific audiences, students are expected to edit for clarity, proofread for correctness, and make effective use of visual design.

As you can see, each section of Writing 20 is designed with an emphasis on writing as a process, not a product per se. As such you will be asked to rethink and rewrite your written work repeatedly. You will need some time to find your argument, and should be prepared to modify or expand upon your ideas. To provide you with feedback on your writing as well as opportunities for revision, each major assignment will be broken down into a series of steps or warm-up exercises that build or draw upon each other over the course of the semester. This will include one or two pre-draft exercises (a short critical summary, tentative thesis topic, outline, etc.) as well as at least 2 drafts. Some form of writing will be submitted each week, and this will form the basis of our class discussions.

## Writing Assignments and Evaluation

The main types of writing we will do in this course are listed below:

**Short Assignments:** These are relatively informal pieces of writing and/or research that will take a number of different forms. For some short assignments you will be asked to respond briefly in writing to something we are reading as a class. These exercises are designed to help you with the initial period of planning and exploration that marks the beginning of any large writing project and will be used to help jump start class discussion. Other short assignments will require you to practice particular writing skills or techniques that you will need for subsequent and more ambitious projects. Unless otherwise noted, your work on these assignments is to be posted to Blackboard by 8:45am the day they are due. Please bring a hard copy of your work with you to class. Short assignments will be graded on the following scale: ✓+, ✓, ✓-, or 0. *Because these exercises will form the basis of much of our discussion in class, late assignments will not be accepted (missing/late=0).*

I should

note that a piece of writing really needs to be remarkable to merit a "check-plus." Don't be disappointed or worried, then, if you earn mostly checks- Your critical responses are designed to be relatively short, low-stakes assignments that I hope will provide you with some of the raw material you need for MP1 and MP2. As such, I grade your critical responses on a fairly simple scale- if you got a "check," you got full-credit for the assignment.

-RS

**Peer Reviews (PR):** Just as all journal articles go through a rigorous process of peer review and revision before being published, so too will the writing you do in this course. At various points during the semester we will break the class into sets of small groups, or workshops, to discuss each other's work-in-progress. For each workshop, you will be asked to read and respond to each other's writing and to practice giving constructive criticism and feedback to your peers. Before each workshop you will prepare a ½ page response to each writer to be distributed in class the day of the workshop. These "peer reviews" are an extremely important part of both your and your classmates' learning in this course and should be prepared with care. Peer reviews will be graded on a pass/fail basis; you will receive a passing grade if you complete the assignment in a thoughtful and timely manner. Because your attendance and participation are key to the success of a workshop, peer reviews for workshops from which you are absent will not be accepted without prior approval (missing/late=0).

**Major Projects (MPs) and Drafts (D):** The work of this course will revolve around two major writing projects, each of which you will take through several drafts and revisions. Drawing on ideas generated in class discussion and in your writing exercises, you will write a first draft (to be posted to File Exchange) which will be read and critiqued by

your peers. Second drafts, usually due two weeks after first drafts, will receive a second round of peer review (from a different group of classmates) as well as comments from me. For your final draft I will also ask you to submit a brief note, or cover letter (~1 page), in which you describe how you chose to respond to my and your classmates' feedback in revising your writing. Final drafts will be submitted directly to me (via Blackboard) for a grade. *Note: Your full participation in the process of peer review and revision is central to your success in this course. Students who fail to turn in a 1<sup>st</sup> or 2<sup>nd</sup> draft or final cover letter will have their final grade for that major writing project lowered by one third of a letter grade (an A to an A-, an A- to a B+, etc.) for each day their draft/cover letter is late or missing.*

## Grading

Over the course of the semester you will be required to complete a series of 15 brief written assignments (roughly one assignment due per week):

- Seven short responses to the readings and/or brief research assignments (~1 page each)
- Eight peer reviews (~1 page each)

You will also write two longer essays (aka Major Projects, ~2000-2500 words), with two preliminary drafts and one final cover letter for each.

The work that you do in this course will be weighted as follows:

Major Project 1:	30%
Major Project 2:	30%
Short Assignments:	15%
Peer Reviews:	15%
<u>Participation and Attendance:</u>	<u>10%</u>
	100%

Because of the many opportunities for feedback and revision in Writing 20, this course is ideally designed for you to succeed. That does not mean that every person will get an A per se (though I will be very pleased if this is the case), but assuming that you make a good faith effort to complete all of the requirements of the course (i.e., genuine efforts at writing and revision, thoughtful responses to other students' drafts, regular attendance and active participation, all deadlines met, etc.) you can reasonably expect to get at least a B. However, for grades higher than a B, something above and beyond merely satisfactory performance in one or more of the course components is required. Feel free to check the online gradebook in Blackboard to see how you are doing, and do not hesitate to contact me for clarification of your grade. I will do what I can to answer any questions you might have.

## Participating in a Seminar

Because each section of Writing 20 is structured as a small seminar capped at only twelve students, Writing 20 represents a unique opportunity for you to be part of a student-centered classroom. As your instructor you should think of me not as a lecturer but rather as a facilitator of a larger conversation we are having as a class, and as such your input and active participation are key. The primary focus in this course is not the text itself, but rather what *you* have to say about the text—and what you choose to do *with* it—both in class discussions and in the work you do as writers. Rather than think of Eugenie Scott or Robert Pennock as the ultimate authorities, I want you to think of *yourselves* as the authors whose ideas we are most interested in. This is a course in which you are encouraged to be creative, to actively respond to the things we read together and to bring your own ideas and impressions to the table. Our discussions are designed to help you to think more deeply about a text and to generate ideas for your major writing projects. In

this sense what you get out of this course depends heavily on what you put into it. I will prepare you ahead of time for your role in any given class session, but it is your job to do the legwork before coming to class. You will be asked to reflect on the issues raised by the readings and develop well-reasoned responses to them. You can expect to do a fair amount of writing both in and out of class and to read and respond to one another's work as you explore tensions and issues that matter to you. As you will soon discover, academic writing is an intensely social and collaborative effort.

## Attendance Policy

While I expect you to come to every class period and to come prepared to participate, I understand that everyone occasionally gets sick, has a family emergency, or simply needs a mental health break. With this in mind, you may be absent two times over the course of the semester (whether excused or unexcused) without adverse effects on your participation grade. **It is your responsibility to find out what happened in class on that day and to pick up any handouts you may have missed.** Any work due in class on that day should be submitted to me by email *before* the start of the missed class period. Each time you arrive late (5 minutes or more) will count as  $\frac{1}{2}$  of an absence. Students who are routinely late or absent will have their end-of-semester grade lowered by one third of a letter grade (an A to an A-, an A- to a B+, etc.) If extenuating circumstances (such as extreme illness) prevent you from coming to class for a prolonged period of time, please let me know so that we can make arrangements with your Academic Advisor.

## Naming and Posting Documents to Blackboard

I will ask you to submit most of your work for this course to its Blackboard site. In most cases, I will ask you post your writing to your group's File Exchange, although I may at times ask you instead to post what you've written to my Digital Dropbox or the Discussion Board. Posting documents to Blackboard is a fairly simple point-and-click process that we will go over in class. But don't worry if you run into any problems the first few times you try to post your work. Simply email me to say that you will bring your writing with you to the next class. We will figure out what went wrong and how to fix it. My guess is that, like me, you will soon find sending texts online more efficient than trading hard copies of papers in person.

When you post your writing to Blackboard, please name your document according to this formula: **w20.section.assignment.lastnamefirstinitial.doc**. For example, if Jane Doe in section 14 were to post her first draft of the first major writing project for this course, she would name her document: **w20.14.mp1.d1.doej.doc**. Observing this formula will make it less likely that I end up with 30 documents on my hard drive that are all named "My Essay."

\*\*\*Note to Mac users: Please be sure to use the file extension ".doc" when saving and naming your work for this course. Neglecting this step will make it impossible for others (including me) to open and read your files in Blackboard.

## Proofreading

The emphasis in Writing 20 is first and foremost on ideas and arguments rather than mechanics and grammar. That said, presentation *does* matter. Students at Duke are expected to be able to write reasonably correct prose. This means that you are responsible for making sure that all your writing is presented as carefully and thoughtfully as you can. I am willing to help you with any questions you may have about points of style, usage, or grammar. But I should not be the first reader of your work nor will I accept any text that strikes me as hurriedly or carelessly prepared. So make sure to edit and proofread all the work you do for this course with care. Use a spell-checker, but don't rely on it. Get a good college dictionary and handbook—and learn how to use them.

## Document Formatting

Please use Microsoft Word for all work you do in this course.

Put your name, assignment, and date on the first page of every text you write for this course. Use a header or footer to number and identify the pages of your text. Format your work in a common, readable font (like this one) with conventional margins and headings—unless you have a good reason not to. If you choose to vary your font, format, or document design, do so for particular reasons and effects—and be ready, if asked, to talk about what those are.

## Citing Sources and Avoiding Plagiarism

No good idea develops in a vacuum. Academic and intellectual integrity are central to the fruitful exchange of ideas that lies at the heart of the university. The proper acknowledgement of other's ideas and influences on your work should be a major concern in the writing you do in this course. To intentionally or unintentionally appropriate the ideas, language, or work of another and pass them off as one's own is to plagiarize. I will not accept work that I suspect may be plagiarized, in whole or in part, and if my suspicions are not allayed after talking with you, I will bring the case to the attention of the Associate Dean for Judicial Affairs. Students who engage in plagiarism risk failure in the course and suspension from the university. But, frankly, I don't expect anything of this sort to occur so long as you and I keep in regular touch about your writing. If you run into problems in completing your work, talk to me about it. If you have any questions about citing sources or acknowledging influences, ask me. I will be happy to help.

The Duke Library system offers an excellent discussion of plagiarism and proper citation practices at the following links: <http://library.duke.edu/research/citing/> and <http://library.duke.edu/research/plagiarism/>

For a look at the Duke Community Standard and further definitions of cheating and plagiarism, see: <http://www.integrity.duke.edu/faq/faq1.html>

### The Writing Studio

No matter how strong a writer you are, everyone benefits from additional feedback on their work. The Writing Studio offers specially trained tutors who can assist you with any stage of the writing process—from brainstorming and researching to drafting, revising, and polishing a final draft. In addition to individual appointments with students, the Writing Studio also offers workshops and writing groups. The main offices of the Writing Studio are located on the second floor of the Academic Advising Center on East Campus, with satellite locations at Perkins and at Lilly Libraries. To make an appointment or to peruse the Writing Studio’s extensive list of resources for writers go to:  
<http://uwp.aas.duke.edu/wstudio/>

### Course Texts

These books can be found in the Duke University bookstore or through major online booksellers such as Amazon. R = required; O = optional.

Barbour, Ian. When Science Meets Religion. New York: HarperCollins, 2000. (O)

Booth, Wayne, Gregory Colomb and Joseph Williams. The Craft of Research. Chicago: University of Chicago Press, 2003. (R)

Harris, Joseph. Rewriting: How to Do Things with Texts. Logan: Utah State University Press, 2006. (R)

Pennock, Robert. Tower of Babel. Cambridge: MIT Press, 1999. (O)

Pigliucci, Massimo. Denying Evolution: Creationism, Scientism, and the Nature of Science. Sunderland: Sinauer Associates Inc., 2002. (O)

Scott, Eugenie. Evolution vs. Creationism: An Introduction. Berkeley: University of California Press, 2004. (R)

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*Acknowledgments: I owe special thanks to my colleagues in the Duke University Writing Program and to my past and present students for their insights and thoughtful feedback in designing and teaching this course. Thank you.*