The Moral Arc of Science

How Science Has Bent the Arc of the Moral Universe
Toward Truth, Justice, Freedom, & Prosperity

Professor Michael Shermer

Catalog Description:
Prerequisite: acceptance to the University Honors Program, or consent of instructor.
This course addresses the evolutionary origins of morality, the developmental psychology of moral emotions, the historical course of moral development throughout the history of civilization, and the forces that have bent the arc of the moral universe toward truth, justice, freedom, and prosperity.

Course Content: This course will examine the moral arc of science. Students will look at how the arc of the moral universe bends toward truth, justice, freedom, and prosperity thanks to science—the type of thinking that involves reason, rationality, empiricism, and skepticism. The Scientific Revolution led by Copernicus, Galileo, and Newton was so world-changing that thinkers in other fields consciously aimed at revolutionizing the social, political, and economic worlds using the same methods of science. This led to the Age of Reason and the Enlightenment, which in turn created the modern secular world of democracies, rights, justice, and liberty.

Instructional Strategies:
This is a seminar course that includes: • Lectures by the professor to establish a context and conceptual framework for course material • Student presentations in the form of an 18-minute TED talk • Extensive classroom discussion of readings • Short clips/sites from the web, films, and time-based media will be used.

Required Readings:

Course Goals, Objectives and Learning Outcomes:
The class will be a combination seminar and lecture format. I will usually start with a lecture to introduce the topic of the day, which will be following by discussion of the
lecture material, a short break at the 90-minute mark of the class, then the second half of the class will be devoted to discussion of the readings and/or student presentations and discussion. Students are expected to arrive at their own conclusions about issues discussed, to be able to give reasons for their conclusions, and to understand why others may disagree. Students are expected to develop further the art of conversation and the exchange of ideas by clearly articulating not only their own beliefs and opinions but that of others, which requires active listening—that is, truly understanding what someone else’s opinions or beliefs are by reiterating them until agreement is reached that the dialogue is actually about the subject at hand and that you are not talking at cross purposes. Such skills are essential for global citizenship in a pluralistic world.

By the end of this course, students will:
1. Learn to arrive at their own conclusions about issues discussed.
2. Be able to give reasons for their conclusions.
3. Understand why others may disagree.
4. Develop further the art of conversation and the exchange of ideas by clearly articulating not only their own beliefs and opinions but that of others, which requires active listening.
5. Understand what someone else’s opinions or beliefs are by reiterating them until agreement is reached—and that dialogue is actually about the subject at hand and not merely talking at cross purposes.
6. Development of such skills are essential for global citizenship in a pluralistic world.

Course Requirements:
—Class Attendance: Class attendance is required. You are expected to attend all class meetings and to have assignments prepared when they are due. For each absence beyond two there will be a 5% deductions from your possible semester grade.
—Class Participation: Participation is more than presence in the classroom. It means active listening and responding to the professor, teaching assistant, and fellow students.
—Reading Assignments: You are asked to study carefully all required readings by the day on which they appear on the projected course schedule and come prepared with a short list of questions that you are to write out and submit to the T.A. each week. Print out your questions (5-10 will do) each week and turn them into the T.A. and keep a copy for yourself for the discussion period of the class. We are reading books, some of which are quite long and dense, so you need to pace yourself throughout the semester to complete the readings on time. This is a discipline well worth learning, which you will in this class. I will teach you how to read a book.
—Exams: There will be two take-home essay exams (a midterm and a final). You will be given the questions the week before and have one week to complete them using your books and any other material you find that is appropriate.
—Create Your Own 10 Commandments Paper. This will be a short paper project consisting of 10 moral principles created by the student with one-paragraph description for each commandment. These will be presented in class and a comparison made with other students’ commandment lists.
—Student Presentation: Each student will do an 18-minute TED talk on a topic of
student’s choice related to course material. We will give you a list of TED talks to watch as good examples, but feel free to watch others at [www.ted.com](http://www.ted.com).

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**Final Project:** This is a team project with 3 students in each of 5 teams. It should be creative, academic, and experimental. We are studying morality. We will be reviewing hundreds of scientific papers on various aspects of human moral (and immoral) behavior. Think of an experiment you can practically conduct during the semester, most likely on campus or nearby in the city of Orange, that meets with approval of the Chapman University research ethics committee (making sure no one was harmed physically or psychologically), that tests some aspect of morality. You will write up your results in a scholarly scientific paper format and present your results in class in a team presentation that can also include visuals, including and especially an edited video of your experiment. We will provide you with many examples throughout the semester and walk you through how to conduct such an experiment.

**Weighted percentages for final grade over 5 assignments:**

- Project: 25%
- Final exam: 20%
- Midterm: 20%
- TED Talk: 15%
- Short Paper: 10%
- Participation: 10%

Grades will be assigned as follows:

- A = 100-91; B = 90-81; C = 80-71; D = 70-61; F = below 60

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**Laptop Policy:** The use of laptops for the purpose of taking notes and looking up references, checking facts, and the like is permitted. What is not permitted is conducting non-class related searches, email, Facebook, Twitter, and the like. As well, other communication devices such as cell phones and tablets should be turned off and stored. Blackberries are permitted, along with telegraphs, typewriters, and other outdated devices.

Chapman University Academic Integrity Policy, i.e., the Plagiarism policy:

Don’t do it! Don’t even think about doing it. Be very careful about copying and pasting into your notes anything from any source on the Internet as you may forget later to rewrite it or reference it. I am a professional writer and editor and I can tell when the writer’s style changes even subtly, and of course thanks to Google it is as easy for me to find copied passages through a search as it is for students to copy and paste passages. The consequences are severe: class failure. Although you may and should use the Internet for your research, all work you turn in must be your own. When citing someone else’s idea, use proper documentation. If you are unsure about what constitutes plagiarism ask me first, and note the Chapman University Academic Integrity Policy: “Chapman University is a community of scholars which emphasizes the mutual responsibility of all members to seek knowledge honestly and in good faith. Students are responsible for doing their own work, and academic dishonesty of any kind will not be tolerated anywhere in the university.” Just don’t do it.
Students with Disabilities Policy:
In compliance with ADA guidelines, students who have any condition, either permanent or temporary, that might affect their ability to perform in this class are encouraged to inform the instructor at the beginning of the term. The University, through the Center for Academic Success, will work with the appropriate faculty member who is asked to provide the accommodations for a student in determining what accommodations are suitable based on the documentation and the individual student needs. The granting of any accommodation will not be retroactive and cannot jeopardize the academic standards or integrity of the course.

Course Schedule

Week 1. January 28
Reading: Harris, *The Moral Landscape, 1st half (Intro, Chapters 1-2)*

Week 2. February 4
Reading: Harris, *The Moral Landscape, 2nd half (Chapters 3-5, Afterword)*
10 Commandments Student Presentations

Week 3. February 11
Reading: Shermer, *The Science of Good and Evil, 1st half (Prologue, Chapters 1-4)*

Week 4. February 18
Reading: Shermer, *The Science of Good and Evil, 2nd half (Chapters 5-8)*

Week 5. February 25
Reading: Zak, *The Moral Molecule, entire book*

Week 6. March 4

Week 7. March 11
Students given Midterm Exam Essay Questions

Week 8. March 18
Reading: Pinker, *The Better Angels of Our Nature, (Chapter 4)*
Students turn in Midterm Exam Essay Answers

Week 9. March 25 SPRING BREAK!

Week 10. April 1
Reading: Pinker, *The Better Angels of Our Nature, (Chapters 5-6)*

Week 11. April 8
Week 12. April 15

Week 13. April 22
Reading: Haidt, *The Righteous Mind, 1st half* (Introduction, Chapters 1-6)

Week 14. April 29
Reading: Haidt, *The Righteous Mind, 2nd half* (Chapters 7-12)

Week 15. May 6. Last Day of Class
Student presentations of final project
Students given final exam essay questions

Week 16. May 13. Final Exam
Students turn in final exam essays