

Technology, Politics, and Society:
A Critical Exploration of Forces That Shape Our Lives
First-Year Seminar in Critical Inquiry
Fall Semester 2017

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Course Description

Self-driving vehicles; genetic engineering; the green energy revolution; drones. These and other recent technology innovations appear to offer exciting opportunities to change lives in the 21st century. However, they also present dilemmas for societies regarding potential rules and restrictions on their uses. This course offers a critical exploration of the tension between science and technology in our society. This is not a science class in the traditional sense, but rather an *interdisciplinary* course about the politics and social implications of scientific innovations. Among the many issues at this intersection of science and society today are debates about Internet privacy, health care policy, gun control, religion and personal choice, climate change, and nuclear weapons and arms control. We will explore the origins and implications of these issues in detail—as well as confront the paradox that governments and societies are sometimes unwilling to pursue the remedies offered by science. Using a variety of references, media, and disciplinary perspectives, we will gain greater understanding of these themes, as well as develop skills essential to success in college-level critical inquiry.

Course Objectives

The course will provide you with intellectual tools for critical thought about politics, science, and society, as well as help you build skills for success in college and beyond. Indeed, these are *parallel objectives in the class*. This class will help you to:

- Develop the abilities, especially the writing skills, that are essential to critical thinking and success in College, and beyond;
- Accurately evaluate strengths and weaknesses of your own writing;
- Interpret complex theoretical and creative texts;
- Understand, appreciate, and objectively critique multiple perspectives including their own; Construct a coherent argument, support it with evidence, and defend the argument;
- Understand, appreciate, and objectively critique multiple perspectives including one's own;
- Design and execute a research project investigating an assigned topic;
- Organize, present and communicate your own reactions to readings, films, and public lectures in class discussions and in written assignments;
- Demonstrate familiarity with campus resources crucial for your academic success, including the Library, the Writing Center, and online resources.

Course Requirements

This is a discussion-based course where diverse viewpoints are encouraged and examined. Students are expected to attend every class and participate actively in class discussions. Assignments include writing projects on technology, gun control, and other controversial topics at the intersection of science and politics, as well as news discussions, class presentations, debates, and a final research project. Grades for assignments will be weighted in the following manner:

Course Participation	15%
Technology Essay	5%
Debate Response Papers	20%
Gun Control Essay	15%
Working Paper	15%
Annotated Bibliography	10%
Final Research Project	20%

Required Texts

Diana Hacker and Nancy Sommers, *Rules for Writers with 2016 MLA Update*, 8th edition. Boston, MA: Bedford/St. Martin's, 2016. ISBN: 978-1-319-08349-6

Philip J. Cook and Kristin A. Goss, *The Gun Debate: What Everyone Needs to Know*, Oxford University Press, 2014, ISBN: 978-0-19-933899-3

Frank Barnaby, *How to Build a Nuclear Bomb and Other Weapons of Mass Destruction*, Nation Books, 2004, ISBN: 978-1-560-256038

Thomas Dixon, *Science and Religion: A Very Short Introduction*, Oxford University Press, 2015, ISBN: 978-0-19-929551-7

Electronic reserve readings:

URL Link: http://libguides.wooster.edu/er.php?course_id=36462

Password: technology

** Note: All readings MUST be completed by the class session for which they are assigned. They will provide necessary background for discussion, and you will be held responsible for them, in class and on assignments.*

Peer Mentor Program—APEX

Our peer mentor for this seminar will be Gabe Wasytko. The APEX Peer Mentor program pairs interested first-years with experienced students who have been successful both in and out of the classroom. Mentors come from a variety of majors and are also involved in activities that range from athletics to theatre to student government, from volunteering to music to other campus organizations. Gabe will be available for academic advising assistance for our section of FYS and will attend class occasionally as well. More information on this dimension of academic support will be forthcoming.

Course Participation & Professionalism (15% of the course grade)

Students are expected to attend class and participate regularly in class discussions and debates. Diverse ideas and opinions are welcome. Indeed, *your* engagement is essential to help create an exciting and positive classroom atmosphere. Class participation and professionalism will be monitored closely by the instructor and teaching apprentice. Beyond simple attendance, professionalism refers to factors such as promptness, courtesy, constructive contributions to class dialogue, respect for other class members' contributions, overall improvement, and other intangibles, to be evaluated and assigned at the discretion of the instructor. Class participation and professionalism are worth 15% of the overall course grade.

Absence Policy: If a student has more three unexcused absences, they will receive a zero (no credit) for this portion of the class. That means that the student must then receive an A in every other portion of the course to receive a grade of B-. If missing a class is unavoidable, students must contact the instructor by e-mail or in person in advance of the class meeting to explain the upcoming absence.

“My Favorite Technology” Essay (5% of course grade)

This short paper asks you to select one type of technology (or item) that you feel has heavily influenced your life, as well as broader society. You should compose a 2-3 page, typed, double-spaced paper that addresses: the technology, its history (invention, development, dissemination); and a thoughtful discussion of how it has impacted your and other lives. The paper should include source citations and a full bibliography. This paper is worth 5% of the overall course grade, and more information will be provided in class. This assignment will include a brief in-class presentation to share your ideas with others.

Debate Response Papers (20% of course grade)

You will write two papers based on in-class structured debate topics. Students will prepare readings in advance of all in-class debates, discuss their views with others, take notes on the major points articulated during the debate, and engage in debriefing. Your essay assignment will be: After a brief introduction describing the central theme of the debate, develop a detailed argument that advocates for one side in the debate versus the other. Be sure to incorporate evidence from readings and real world examples to effectively make the case for one side in the debate that you now choose. In the process, you might consider what are some of the most important points that you heard in the in-class debate. Finally, develop a summation argument that includes policy prescriptions for solutions to the issue or challenge. Papers should be 2-3 typed, double spaced pages, and should apply careful and consistent source citations methods.

* *Re-Writing Option*: This class is designed to help you improve your writing, and so you will have the option of re-writing these papers to improve them (and your grade). Revised papers will be re-graded, with the final grade reflecting an average of the two grades awarded.

Gun Control Essay (15% of course grade)

This essay will explore the controversial politics of gun control. Drawing from our assigned readings and outside supporting material, you should develop an essay that addresses the following points: 1) Provide a brief introductory paragraph and clear thesis statement to be explored; 2) Briefly review the history of controversy in the gun control debate; 3) Develop a detailed argument about whether or not the United States needs to sharply restrict access to firearms—when, how, and why? 4) Make clear how this argument relates to historical patterns or initiatives in gun control. Papers should be 4-5 typed, double-spaced pages, and should apply careful and consistent source citation.

* *Peer Review*: This assignment offers an opportunity for peer review. A draft version will be due in class on an assigned date, and students will work in small groups to offer suggestions and edits to one another. You will then have an opportunity to revise your paper before final submission. More detailed information on this will be presented in class.

Working Paper (15% of the class grade)

Students will participate in a simulation of international diplomacy during the week of October 30-November 3. This summit simulation is a unique opportunity for students to put theory into practice through debates about potential solutions to global problems. Students will select a country to represent, and take on that perspective while engaged in international negotiations on the issue of proliferation of weapons of mass destruction. *Student attendance at the simulation sessions is mandatory*. Students should prepare for the conference by reading the rules packet and conducting in-depth research on their country and the issues under debate. Working papers are short (2-3 page) documents that outline a country's position on a given problem, and suggest appropriate policy proposals. They are due in advance of the simulation. Copies of student papers will be distributed to the entire class to serve as useful foundations for speeches and negotiations. More information on this assignment will be provided in class.

Annotated Bibliography Assignment (10% of class grade)

This assignment helps you prepare for the final research project by collecting and summarizing source material related to your research topic. This project encourages you to start early on paper development and gathering sources, and will follow a distinct format that will be further discussed in class.

Final Research Project (15% of class grade)

This research assignment will help you to achieve two goals: 1) a deeper understanding of a controversial issue linking politics, technology, and society; and 2) development of research skills that will help you to prepare for the final research project. You will be required to conduct research on a topic from the list below (or an alternative, negotiated with the professor). Specific research themes and research strategies will be discussed in class. You are also encouraged to schedule a consultation meeting with a reference librarian for this project. The assignment is to complete a 6-8 page, double-spaced, typed paper on your findings is worth 15% of the overall course grade. Papers should include careful source references.

Interesting topics at the intersection of technology, politics, and society might include:

- The Campaign to Stop Killer Robots (fully autonomous weapons)
- DNA Testing and Criminal Trials
- Green Energy
- The Geopolitics of Coltan Mining
- Drones and Targeted Killing
- Climate Change
- National Security Surveillance
- Artificial Intelligence
- Hyperloop Politics and Economics
- Physician-Assisted Suicide
- Nuclear Waste Storage (Yucca Mountain controversy)
- Fighting Zika and Ebola
- Green Revolution in Agriculture and Global Food Policies
- Videogames and Violence

In your essay, you should develop a narrative that addresses the following set of questions: What is the technology, what its history and status of development? What are the moral legal and political questions posed by it? What is the controversy? Who champions and who challenges this innovation? How have the international political actors have dealt with it so far? How should they deal with it? Regardless of your choice of topic, there are some common parameters for this assignment. First, you should discuss ideas for the assignment with your instructor and teaching apprentice. Second, you should collect information on the topic through library research. Third, *you should draft your work and schedule a mandatory Writing Center consultation by Thursday, December 7th. Writing Center staff will send me confirmation of this appointment.*

* *Class Presentation*: The final part of this assignment is an opportunity to present your findings in class. You should prepare an 8-10 minute presentation on the results of your research and important lessons learned from the assignment. After the presentation, be prepared to answer questions and lead a discussion on the issues raised by the research. In addition, you may want to consider ways to make the oral presentation more convincing or interesting—such as handouts, a Powerpoint presentation, or other audio-visual aides. The presentation is worth 20% of the assignment grade, and you will be evaluated on the coherency and clarity of your arguments, the quality of information presented, and originality in the presentation. More information about this will be forthcoming in class.

Resources

The Writing Center

The Writing Center, located in Andrews Library, is available for all students who wish to have experienced writers and teachers of writing assist them with all facets of the writing process. Students can schedule appointments at the Center or seek assistance on a walk-in basis. The Center is staffed with professional consultants and trained peer tutors. For more information about the Center, visit their website at: www.wooster.edu/writing_center.

The Learning Center

The Learning Center, which is located in APEX (Gault Library), offers a variety of academic support services, programs and 1:1 meetings available to all students. Popular areas of support include time management techniques, class preparation tips and test taking strategies. In addition the Learning Center coordinates peer-tutoring for several academic departments. Students are encouraged to schedule an appointment at the APEX front desk or call x2595.

The Learning Center also coordinates accommodations for students with diagnosed disabilities. At the beginning of the semester, students should contact Amber Larson, Director of the Learning Center (ext. 2595; alarson@wooster.edu), to make arrangements for securing appropriate accommodations. Although the Learning Center will notify professors of students with documented disabilities and the approved accommodations, it is the responsibility of the students to speak with professors during the first week of each semester. If a student does not request accommodations or does not provide documentation, faculty are under no obligation to provide accommodations.

Academic Integrity

This class will operate on a set of expectations consistent with the College's Code of Academic Integrity and Code of Social Responsibility, outlined in *The Scot's Key* and the *Handbook of Selected College Policies* (www.wooster.edu/students/dean/). The Codes and guidelines form an essential part of the intellectual contract between the student and the College. Cheating in any of your academic work is a serious breach of the Code of Academic Integrity and is grounds for an 'F' for the entire course. Such violations include turning in another person's work as your own, copying or paraphrasing from any source without proper citation, fabricating excuses or lying in connection with your academic work. You will be held responsible for your own actions. If you are unsure as to what is permissible, always consult with your course instructor and teaching apprentice.

Grading Scale

As stated in The College of Wooster *Catalogue*, letter grades are defined as:

"A range"	indicates an outstanding performance in which there has been distinguished achievement in all phases of the course;
"B range"	indicates a good performance in which there has been a high level of achievement in some phases of the course;
"C range"	indicates an adequate performance in which a basic understanding of the subject has been demonstrated;
"D range"	indicates a minimal performance in which despite recognizable deficiencies there is enough to merit credit;
"F or NC"	indicates unsatisfactory performance.

Course Policies

1. Plagiarism is a serious offense and will be treated as such. References must be clearly cited in your papers. Work done by other students or work done previously for other classes is also unacceptable. Students who plagiarize face penalties including possible failure of the course and could be subject to further academic disciplinary action. If there are any questions regarding proper academic behavior please see the professor or refer to the "Code of Academic Integrity" in the official student handbook *The Scot's Key* (www.wooster.edu/students/dean/).

2. There will be no extensions given for the paper deadlines. Students handing in a late paper will lose half a grade level for each day they are late. Late papers will only be accepted in this manner with prior permission from the instructor.

3. Students must turn off all cell phones and other electronic devices before class. Any failure to do so, especially the use of cell phones during class time, will lead to a severe penalty for the student's class participation grade. During regular class sessions laptop computers or tablets are allowed in class for note-taking and accessing electronic readings only.

Course Outline

Week 1: Getting Started: Introduction to Class and the College

Thursday August 24: Introduction to the Course

“Does Social Media Have Largely Positive Impacts on Its Users?” in Kurt Finsterbusch, ed., *Taking Sides: Clashing Views on Social Issues*, 17th Edition, 2014, pp.462-480 (e-reserve)

Nicholas Carr, “Is Google Making Us Stupid?” *The Atlantic Monthly*, July 2008, pp.1-15 (e-reserve)

- * **Event:** Opening Convocation in McGaw Chapel (after class at 11:00 am)
- * **Event:** Service Project for all First Year Students on Saturday, August 26

Week 2: Introduction to Science, Technology, Politics and Society

Tuesday August 29: What is Science?

Thomas Dixon, “What are Science-Religion Debates About?” Chapter 1 in *Science and Religion: A Very Short Introduction*, 2015, pp.1-17

Carl Sagan, “Why We Need to Understand Science,” in Richard W. Grinnell, ed., *Science and Society, Longman Topics Reader*, 2007, pp.11-18 (e-reserve).

Thursday August 31: What is Politics?

Gregory M. Scott and Stephen M. Garrison, *The Political Science Student Writer’s Manual and Reader’s Guide*, Eighth Edition, 2017, Chapter 1: “Read and Write to Understand Politics,” pp.1-18 (e-reserve)

President Donald Trump, “Inaugural Address,” January 20, 2017, Washington, DC, transcript (e-reserve)

David Himmelstein and Steffie Woolhandler, “Repealing the Affordable Care Act will Kill More than 43,000 People Annually,” *Washington Post*, January 23, 2017, pp.all (e-reserve)

- * **Assignment Deadline:** My Favorite Technology Essay, Due in class Thursday, August 31
- * **Event:** Attend Scot Spirit Day on Friday September 1 (4:30-7:00pm)

Week 3: Science, Technology and Politics: Historical Introduction

Tuesday, September 5: Science and Politics in History

Thomas Dixon, "Galileo and the Philosophy of Science," Chapter 2, pp.18-36

Shawn Otto, "Chapter 2: The Politics of Science," *The War on Science: Who's Waging It, Why It Matters, and What We Can Do About It*, 2016, pp.43-53 (e-reserve)

* *Guest Presentation: Kate Gullatta, Learning Center, on Time Management*

Thursday, September 7: Researching Technology, Politics, and Society

Diana Hacker and Nancy Sommers, *Rules for Writers with 2016 MLA Update*, Section 1, pp.1-64

* *Guest Presentation by FYS Liaison Librarian Mark Gooch, meeting in McCoy Computer Lab*

* **Assignment:** Come to Class Prepared with Final Research Paper Topic Idea

Week 4: Controversies in Science and Politics: Evolution and Sustainability

Tuesday September 12: The Evolution Controversy

Thomas Dixon, "Darwin and Evolution," Chapter 4, pp.58-80

L. Goodstein, "A Web of Faith, Law and Science in Evolution Suit," *New York Times*, September 26, 2005, p.A1 (e-reserve)

* *Guest Presentation: Professor Mark Wilson on the Evolution Controversy*

Thursday September 14: Creationism Versus Intelligent Design

Thomas Dixon, "Darwin and Evolution," Chapter 5, pp.81-103

Diana Hacker and Nancy Sommers, *Rules for Writers with 2016 MLA Update*, Section 2, Academic Reading, Writing, and Speaking, pp.65-123 (read and bring with you to class)

* *Guest Presentation: Writing Center Thesis Development Workshop*

* *Documentary: The War on Science*

* **Event:** Black & Gold Weekend, FYS Family Reception on Saturday, September 16

Week 5: Controversies in Science and Politics: Environment and Climate Change

Tuesday September 19: Climate Change

Joseph Romm, *Climate Change: What Everyone Needs to Know*, 2016, Chapters 1 and 5, pp.1-30 and 171-191 (e-reserve)

Robinson Meyer, "Trump's EPA Chief Denies the Basic Science of Climate Change," *Atlantic Monthly*, March 9, 2017, pp.all (e-reserve)

* **Event:** Kareem Abdul-Jabbar Forum, Tuesday, September 19, McGaw Chapel (required)

Thursday September 21: Academic Integrity and Structured Debate on Climate Change Controversy

Diana Hacker and Nancy Sommers, *Rules for Writers with 2016 MLA Update*, Section 2, Academic Reading, Writing, and Speaking, pp.65-123 (read and bring with you to class)

Naomi Oreskes, "The Scientific Consensus on Climate Change," *Science* 306, December 3, 2004, pp.all (e-reserve)

Richard S. Lindzen, "There is No Consensus on Global Warming," *Wall Street Journal*, June 2006, pp.all (e-reserve)

* **Assignment:** Structured Debate Response Paper, Due Monday, September 25

Week 6: Controversies in Science and Politics: Gun Control

Tuesday, September 26: Introduction to Guns and Gun Control

Philip J. Cook and Kristin A. Goss, *The Gun Debate: What Everyone Needs to Know*, 2014, Chapters 1-3, pp.1-54; and Chapters 8-9, pp.155-188

Thursday, September 28: Gun Violence

Cook and Goss *The Gun Debate: What Everyone Needs to Know*, Chapters 4-5, pp.55-88

* *Documentary: Bowling for Columbine*

Week 7: Gun Control

Tuesday October 3: How America Regulates Guns

Cook and Goss, *The Gun Debate: What Everyone Needs to Know*, Chapters 6-7, pp.89-154

* *Guest Presentation: Steven Glick, Director, Security and Protective Services*

Thursday October 5: The United Nations Arms Trade Treaty

Arms Control Association, "The UN Arms Trade Treaty: Just the Facts," Briefing Transcript, November 7, 2013, pp.all (e-reserve)

Cook and Goss, *The Gun Debate: What Everyone Needs to Know*, Chapters 10-11, pp.189-213

* **Assignment:** Gun Control Essay Due in class, Peer Review Process

* **Assignment:** Country Preference Sheets for Global Issues Summit in class

Fall Break

October 9-13: No Classes During Week of Fall Break

Week 8: Introduction to Weapons of Mass Destruction

Tuesday, October 17: Building a Bomb

Frank Barnaby, *How to Build a Nuclear Bomb and Other Weapons of Mass Destruction*, 2004, pp.1-84

* **Assignment:** Final Gun Control Essay Due in class

Thursday, October 19: WMDs and International Conflict

Barnaby, *How to Build a Nuclear Bomb and Other Weapons of Mass Destruction*, *Nation Books*, pp.107-136

* *Documentary: Countdown to Zero*

Week 9: Building a Bomb

Tuesday, October 24: Breakout States Iraq and North Korea

Barnaby, *How to Build a Nuclear Bomb and Other Weapons of Mass Destruction*, 2004, pp.85-104

Thursday, October 26: The International Nuclear Nonproliferation Regime

Scott D. Sagan and Kenneth Waltz, "The Great Debate: Is Nuclear Zero the Best Option?" *The National Interest*, September/October 2010, pp.88-96 (e-reserve)

* **Assignment:** Working Paper Due on Friday, October 27, by 12:00 noon

Week 10: Global Issues Summit

Tuesday, October 31: Summit Diplomacy

Global Issues Summit Delegate Handbook, 2017, pp.all (e-reserve)

Thursday, November 2: Summit Diplomacy

Global Issues Summit Delegate Handbook, 2017, pp.all (e-reserve)

Week 11: GIS Debriefing and Health Sciences

Tuesday November 7: GIS Debriefing, and Return to Class Assignments and Business

Jeffrey S. Lantis and Jessic DuPlaga, *The Global Classroom: An Essential Guide to Study Abroad*, 2010, Chapters 1 and 2, pp.1-35 (e-reserve)

* *Guest presentation: Jamie Adler, Director of Off-Campus Study*

Thursday, November 9: Health and Wellness

BBC News, "Many Scots Choose to Ignore Lifestyle Health Advice," BBC.com, 2011, pp.all (e-reserve)

* *Guest Presentation: Director Ray Tucker, Longbrake Wellness Center (meet at the Wellness Center conference room)*

Week 12: Life Sciences: Policy and Technology

Tuesday, November 14: Guest Lecture on Public Health

Assigned Readings: tbd

* *Guest Presentation: Cathy McConnell and APEX Staff on Internships and Fellowships*

Thursday November 16: Bioethics Controversies

Debate: “Should Biotechnology be Used to Alter and Enhance Humans?” in Gregory E. Kaebnick, ed., *Taking Sides: Clashing Views on Bioethical Issues*, 2014, pp.247-266 (e-reserve)

Chris Lillis, “Debating the Public Policy of Vaccines,” *drs.foramerica.org* blog, 2017, pp.all (e-reserve)

Lee M. Silver, *Remaking Eden: How Genetic Engineering and Cloning Will Transform the American Family*, 2007, Prologue and Part One, pp.1-56 (e-reserve)

Week 13: Life Sciences: Population Control?

Tuesday November 21: Structured Debate on Population Control

Debate: “Do We Have a Population Problem?” In Thomas A. Easton, *Taking Sides: Clashing Views in Science, Technology, and Society*, 11th edition, 2014, pp.all (e-reserve)

Aileen Clarke, “See How the One Child Policy Changed China,” National Geographic Data Points, November 13, 2015, <http://news.nationalgeographic.com/2015/11/151113-datapoints-china-one-child-policy/> (online)

Mei Fong, “How China’s One-Child Policy Led to Forced Abortions, 30 Million Bachelors,” Interview with Mei Fong on Terry Gross’ Fresh Air Radio Program, February 1, 2016, <http://www.npr.org/2016/02/01/465124337/how-chinas-one-child-policy-led-to-forced-abortions-30-million-bachelors> (read article summary online and listen to radio interview at this link)

Sarah Conly, “Here’s Why China’s One-Child Policy Was a Good Thing,” *Boston Globe*, October 31, 2015, pp.1-8 (e-reserve)

* **Assignment:** Structured Debate Response Paper, Due Monday, November 27

* **College Schedule:** *No Classes (Thanksgiving Break), November 22-24*

Week 14: Modern Controversies in Science and PoliticsTuesday November 28: Writing Preparation and Presentations

Diana Hacker and Nancy Sommers, *Rules for Writers with 2016 MLA Update*, Section 9: Research, pp.395-430 (read and bring with to class)

* *Presentation by Writing Center: Paraphrasing and Incorporating Sources*

Thursday November 30: Career Services and Research Projects Presentations

* *Guest Presentation: Ashleigh Best, Career Services Exploration*

Week 15: Research Project Class PresentationsTuesday December 5: Research Projects PresentationsThursday December 7: Research Projects Presentations

* **Assignment Deadline:** Final Research Paper due Wednesday, December 13, at 12:00 noon