

St. Petersburg College
Department of Applied Ethics
College of Policy, Ethics and Legal Studies

COURSE SYLLABUS

PHI 2647
Ethics in Science and Technology
0640– Spring 2025

INSTRUCTOR:

Name: Dave Monroe

Contact Information:

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Office Hours: TBA

Office Locations: EI 133 (St. Pete), or Zoom

Instructor Web Page: http://it.spcollege.edu/course_info/inquiry.cfm?number=1061

ACADEMIC DEPARTMENT:

Applied Ethics Institute

Dean: Dr. Susan Demers

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COURSE INFORMATION:

The course information includes C&I Committee approved Course Description, Major Learning Outcomes and Course Objectives.

Course Description:

This course extends critical thinking and ethical reasoning to issues in the sciences and technology fields. Reasoning about problems in these areas is both vital and timely, as the sciences have transformed the contemporary world. Whether this is always for the best is open for debate. Students will have the opportunity to investigate and evaluate questions about scientific practices, the direction and purpose of technological development, problems connected to artificial intelligence, robotics, enhancement technologies, virtual reality, and the risks associated with existing and emerging technologies.

Learning Outcomes and Objectives:

1. The student will show basic competence in the philosophy of science by:
 - a. using criteria of adequacy to assess competing explanations.

- b. analyzing and contrasting different models of scientific reasoning.
 - c. demonstrating the use of the scientific method
- 2. The student will identify and analyze a variety of ethical issues when presented with examples by:
 - a. evaluating various perspectives and positions regarding science, technology, and attendant ethical challenges.
 - b. distinguishing between scientific and ethical issues.
- 3. The student will apply critical thinking skills and ethical principles to resolve ethical issues in science and technology by:
 - a. employing principles to resolve ethical dilemmas when presented with hypothetical or real examples of problems found in scientific and technological practice.
 - b. constructing or assessing evidence-based sound or cogent arguments

Further information about the course:

We will use MyCourses for communication, assignment submission, and other business.

This course uses Turnitin.com drop boxes for papers.

RESOURCE INFORMATION:

There is no required textbook for this class. All required readings will be provided via MyCourses, free of charge. The student bears responsibility for the cost of printed copies.

It is absolutely VITAL to this class that you do the reading each week. I know that students have many demands on their time (work, family, and other classes). However, the nature of this class requires that you read the assigned articles, book chapters, etc., *in advance of our meetings*.

Reading philosophy can sometimes be challenging. Philosophers love to invent complicated terms to try to “clarify” their meaning, and the subject can be dense. So you will need to read patiently and carefully. I also recommend taking notes as you read—it will aid in your comprehension and be very useful when it is your turn to lead discussion.

MEETING INFORMATION:

Course Location: LIVE ONLINE, ZOOM

Meeting Days: Tuesdays and Thursdays

Class Times: 2-3:15 p.m.

IMPORTANT DATES:

Course Dates: 1/13-5/9/25

Drop with Refund: TBA

Withdrawal Deadline (70% point): TBA

College Closed/Holidays: 1/20, 3/9-3/15

Financial Aid: <http://go.spcollege.edu/fadates/>

Dates for Trip to London: 5/9-5/15/2025

MEETING MODALITY

This class will meet in Zoom, but we will rely upon MyCourses heavily. If you are unfamiliar with MyCourses, log on by going to mycourses.spcollege.edu, or by clicking

the link for MyCourses on your MySPC page. Enter your student number/username and password (which should be the same as the one for your college email account). Start by browsing the site, making sure to do the Introduction to MyCourses you'll find in the "Start Here" module in the Course Content area.

You will find units, including assignments, lecture notes, drop boxes for work, etc., under Course Content. Due dates and the course scheduling, including the readings, are listed in the calendar. Other important college dates will be listed there as well.

I will also try to post supplemental links and interesting online content periodically, including primary sources, etc. If you would like to dig deeper into philosophical literature, please let me know and I'm happy to point you in the direction of all sorts of goodies.

If you have Zoom set up, we can also use it for office hour meeting appointments.

Here's a student Zoom Tutorial:

<https://mycoursesupport.spcollege.edu/mycourses/zoom/accessing-a-zoom-meeting-with-authentication-enabled>

If you require tech support, here's who to contact:

SPC Technology Help Desk: (727) 341-4357

Zoom Support: <https://support.zoom.us/hc/en-us>

MyCourses Support: <https://mycoursesupport.spcollege.edu/mycourses-support>

ATTENDANCE:

The college-wide attendance policy is included in the Syllabus Addendum

<http://go.spcollege.edu/addendum> The policy notes that each instructor is to exercise professional judgment and define "active participation" in class (and therefore "attendance"), and publish that definition in each syllabus. **For this class, attendance is defined as being present and ready to participate in class discussions. If you have more than three unexcused absences by the 70% point of the semester (the last day to withdraw), you will not have satisfied my criterion for "active participation," and I will recommend you receive a grade of W for the course.**

Absences may be excused with documentation of an emergency or arrangements made with me prior to the missed class period. Unless those prior arrangements are made or documentation is provided, I will not excuse absences after the fact.

GRADING:

Your final grade in this class will be based on the points you earn on discussion participation, papers, and presentations. There are a total of 100 points available for the semester. The final grades will be determined as follows:

A = 100% - 90%	90-100 pts.	STUDENTS MUST EARN 70% OR HIGHER
B = 89% - 80%	80-89 pts.	
C = 79% - 70%	70-79 pts.	
D = 69% - 60%	60-69 pts.	
F = 59% and below	0-59 pts.	

This chart will allow you to keep tabs on your grade as the semester unfolds, or you can check your progress on MyCourses. Keep in mind that the scale figures total points out of 100, so the MyCourses report will not be fully accurate until the end of the term.

A note on due dates:

Due dates for all assignments are posted on our MyCourses calendar, so be sure to check it frequently. **Do your best to complete your assignments by the due dates.** Life is complicated and sometimes managing your schoolwork can be a struggle. I understand that. But there is only one non-negotiable due date: the seminar paper is due April 27th.

Late work policy:

In cases of **documented emergency** (sudden illness, a death in the family), I will accept late work **without penalty**. Students will be required to provide documentation to show that a genuine emergency has occurred (e.g., doctor's note.)

ASSIGNMENTS:

Regular Assignments

Class Discussion: 15 points.

Because this class is primarily a seminar, the quality of discussion directly correlates to the quality of the class experience for everyone. To that end, 15% of your overall grade will depend upon your participation in class discussion. Earning a good grade on discussion does not mean you have to be chatterbox or “that guy in the philosophy class” (warning—profanity: <https://www.theonion.com/guy-in-philosophy-class-needs-to-shut-the-fuck-up-1819568055>) What it *does* mean is that you should expect to carry your fair share of the discussion of the class readings. Feel free to share your interpretations. But also ask questions. Seek clarification! The point of a seminar class is that the group learns communally, and all contributions count.

Attendance: 10 points

Since the class depends on discussion, it's important that everyone attend as often as possible. Unexcused absences will count against you in terms of “official” participation (see the attendance policy above), but *both* unexcused absences and excused absences that *aren't emergencies* may count against your attendance grade points. Do your best not to miss class!

Presentation: 20 points

Each student will “present” on an assigned reading once during the semester. The presentation is not a formal speech. You don't have to stand up in front of class. Rather, it is the presenter's responsibility to lead discussion on the topic that they've chosen. There are guidelines in the “Presentation Guidelines” module in our MyCourses page, and I will model how the discussion should work for the first few weeks.

Briefly, you should summarize the key arguments in the reading you've chosen, then offer some critical analysis (arguments against the author's claims, looking at different points of view on the problem, or think about alternative ways of progressing the author's arguments), and then come up with 1-4 questions about the reading that help frame the discussion.

Seminar Paper: 55 points

Each student will write a 2500-3000 word paper on the topic of their choice in the ethics of science and technology. This will be a *research paper* and requires the use of at least 4-5 credible sources (academic papers, books, etc.). You will take a position on that topic and form arguments in support of your position. You can use sources from class (i.e., the assigned readings), but you must also incorporate your own (outside) researched information. Your topic does not have to be unique, meaning multiple students may write on the same issue.

The paper must be formatted and cited correctly in MLA or APA format.

You must decide your topic no later than **March 7th** The seminar paper is due **April 27th**.

Extra Credit Assignments

I will offer several extra credit opportunities throughout the term. Participation in these opportunities will add points to your overall grade.

STUDENTS' EXPECTATIONS AND INSTRUCTOR'S EXPECTATIONS

This course may involve thinking about and discussing some controversial topics. As such, the rules of this course aim to facilitate learning the course material, generating an atmosphere of respect for peers, and creating a good forum for discussing arguments. I expect you to always observe these rules, including in any potential Zoom meeting or online communication. I will also honor these rules as your instructor.

Rule #1: Treat your classmates with respect. Insulting, shouting at, or otherwise disrespecting your classmates is intolerable. If you mistreat a classmate, I will remove you from the classroom and pursue further discipline with the Associate Provost. Many of us have different viewpoints on a range of issues, and as this is a class on ethics, everyone should feel safe to express and defend their position.

Rule #2: Be mindful of causing distractions in the virtual classroom environment.

Please keep your microphone muted unless you are the one asking questions or leading discussion.

If you have a question, please either write your question in the chat or “raise” your virtual hand. Please don’t just start talking—if more than one person talks at a time the noise makes nonsense of what you’re saying.

Please be conscientious about your setting. At this point we’ve all experienced some weird thing happening on Zoom. They can be very distracting, so do your best to set up in an environment that won’t involve undue disruptions.

Rule #3: Students are responsible to know the pace of the course and to arrange for materials if they miss class. It’s on YOU to know what we’re covering and to keep up. If you miss a class, don’t worry—our Zoom meetings will be recorded, captioned, and uploaded in the appropriate modules.

Rule #4: Expectation of Academic Honesty. To put it plainly, this is an ethics course and cheating of any kind cannot be tolerated; i.e., **cheating of any kind will result in a grade of "F" for the course.** This includes the use of generative AI, such as ChatGPT, to do your work. It is your responsibility to be familiar with SPC's policies, rules, and the consequences of violations. A link to the college policy can be found at the following link: <https://www.spcollege.edu/current-students/student-affairs/student-right-to-know>

To promote academic integrity, you will be asked to submit your papers in Turnitin.com drop boxes.

Rule #5: Check and read your email regularly. I will post announcements via email and the News area on MyCourses at various intervals of the semester. These may consist of emergency updates, changes to what we're doing in class or to assignment due dates, additional extra credit opportunities, or other things it would be important to know. You are responsible to read those messages and know what's going on. So, check your email regularly.

Online Student, Faculty and Staff Expectations and Performance Targets

This spells out the parameters of what you can expect from me regarding grading times, etc.

I tend to be very quick to respond to emails and messages. I promise that I will answer emails within 24 hours on weekdays and within 48 hours over the weekends. I also promise to grade your work promptly. Generally speaking, you can expect **very** quick turnarounds on grades—usually within two days following the due date.

When your assignments are graded, I will update the MyCourses grades so you will **always** know where you stand.

STUDENT SURVEY OF INSTRUCTION:

The student survey of instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

SCHEDULE OF TOPICS:

This is a schedule of the order in which we'll progress through the course. Specifics regarding the timing of lessons and due dates are available in the MyCourses page for our course. I reserve the right to adjust pacing as needed, with the provision that due dates will never be moved forward (i.e., giving you **less** time for assignments), only backward.

Week One: Syllabus & Course Introduction, Class Community Building

Week Two: Introduction to Philosophy of Science: What is "Science?" Do the sciences offer the best (or exclusive) method for obtaining knowledge?

Week Three: Ethics in Science: Who should direct scientific inquiry? Should we advance science, because we can?

Week Four: Movie: *Jurassic Park* or *Frankenstein*

Week Five: Understanding Technology—Philosophy of Technology

Week Six: Philosophy of Technology, Cont.

Week Seven: Technology and Justice: Distributive and Criminal

Week Eight: Ethical Issues around AI, Automation, and Robotics, Pt. 1: Problems with their use.

Paper Topic Due March 7th.

Week Nine: AI, Automation and Robotics: Issues in Engineering.

Week Ten: AI, Automation and Robotics, Pt. 2: Moral Consideration

Week Eleven: Issues with Information Technology

Week Twelve: Technology and Environmental Issues

Week Thirteen: Technology and Human Nature, Part 1. Rethinking “human nature.”

Week Fourteen: Technology and Human Nature, Part 2: Authenticity and Creativity

Week Fifteen: The Ethics of Human Enhancement: Restorative vs. Enhancement Technologies.

Week Sixteen: Finals Week. No Exam. Seminar Paper Due April 27th by 11:59 p.m.