

University of North Texas
Ethics in Science (Fall 2026)

PHIL 2600.004

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Class time: Tues / Thurs 3:55-5:15 pm

Class location: Environmental Science Building 115

Office hours: by appointment

I. Rationale and course outline:

Human beings are constructing a new world through science and technology. Just consider the rapid changes in medicine, information, transportation, artificial intelligence, materials, energy, food, and much more. In all these cases, we confront questions at the intersection of truth and power, knowledge and justice. The kind of world we create will be decided not simply by the expanding knowledge of science or the increasing powers of technology. It will depend more significantly on our visions about good and bad and right and wrong. In other words, we must think simultaneously of science and ethics.

This course aspires to make you a more informed and astute participant in the conversations that shape our lives at the intersection of science and ethics. We will try to address a variety of philosophical questions: what is the relationship between ethics and science? What do scientists do and assume in their quest for scientific inquiry and knowledge? What makes an inquiry ethical? What are ethical dilemmas in the age of science? And what the social and personal responsibilities of inquirers and practitioners are.

II. Course Outcomes:

By the end of the course students should be able to demonstrate the ability to:

- Define and classify basic concepts in ethics (moral philosophy) and science.
- Identify and categorize the most important issues at the intersection of ethics and science.
- Understand, interpret, analyze, and assess those issues.
- Develop improved reading and critical thinking skills as well as open-minded and respectful dialogue skills.

III. Format and Procedures:

This class will be fully in person with some lecture to introduce, contextualize, and clarify readings. Students should expect to actively engage with the material and class time will focus on small and large group discussion, application exercises, low-stakes in-class projects, and creative activities.

IV. Course Requirements:

In-class devices policy:

You are allowed to use laptops and tablets for note-taking and class related purposes during class time. Please do not use cellphones or earphones in class: if you use cellphones or earphones in class, your attendance that day will not be counted. Similarly, if you are using your laptops for non-class related purposes, your attendance will not be counted. If you have an emergency and need to take a call, feel free to step outside for a moment.

Class participation and etiquette:

Philosophy is not an individual practice – it works best in dialogue and with others together, and thus requires constant engagement with your peers. Students will be expected to participate and voice their understandings of the course readings, as well as their assessments of the arguments. Students are expected to come to class having read the material and prepared to discuss the readings.

In engaging in ethics and philosophy together, we may not always agree. Disagreement, however, should never invite disrespect or hostility. Students are expected to show each other respect and good faith in discussion.

Course readings:

Required text: Briggie, Adam and Mitcham, Carl. Ethics in Science: An Introduction. Cambridge: Cambridge University Press, 2012.

Other reading selections will be provided as PDF files in Canvas

V. Assessments, Grading Policies and Procedures

Final grades will consist of the following:

Assignment / Activity	Percentage of Grade
Attendance	15%
Reading responses	30%
Mid-term exam	20%
Group presentation / Final project	35%

Attendance (15%)

Attendance is mandatory in this class. I fully understand that some flexibility is needed, so I will allow up to **two unexcused absences** – which means you can be absent for two times without reaching out to me with a valid reason. After two unexcused absences, students will lose 5% of their attendance grade for every further unexcused absence. If you have a family emergency, aren't feeling well, or have a valid reason as defined by UNT policy, please reach out to me to have your absence marked **excused**. I will be taking down attendance at the beginning of every class.

Reading responses (30%)

You are required to complete at least **10** of these over the course of the semester. Each reading response should consist of a short summary of the main points of the reading (~200 words), critically evaluate the reading based on the prompt question provided for that reading (~350 words), and pose an insightful question about the reading (~50 words). Make sure to engage closely with the text itself by citing important passages from the author's own words. Each of them will be **due** the day before the reading is scheduled to be discussed in class on the syllabus: for example, if it's a Tuesday reading, the response will be due to be completed by midnight on Monday. You are free to choose which 10 reading responses to complete out of a total of **22** options corresponding to readings over the semester. Each of these will count for 3 points of your course grade, and you may complete **up to 3 more** in addition to the required 10 **for extra credit**.

Mid-term exam and short essay (20%)

This mid-term exam will cover and evaluate your engagement with the assigned content, readings, lectures, and class discussions from the first seven weeks of class. It will be a **take-home** and **open-note** exam that explicitly requires you to draw on notes, class powerpoints, and readings. The exam will consist of two parts: **first**, a combination of multiple choice and open, short response questions, and **secondly** a short essay response section where you can pick to respond out of several offered prompts. This mid-term is meant not to test your retention of individual knowledge points but instead your engagement with class discussion and your ability to critically apply themes and perspectives we cover.

Group presentation (15%)

This is a collaborative assignment in which, as a group, you will identify a specific case study that highlights the relationship between ethics and science and collaboratively give a 10-15 minute presentation. There are three components in this assignment: (i) topic submission; (ii) group presentation; (iii) individual written reflection. Detailed instructions will be provided on Canvas. The assignment will be graded using the CORE rubric.

Final project "Imagining Scientific Futures" (20%)

This final project asks you to creatively imagine the future through the lenses of the issues of ethics and science we've covered. The project will consist of two components: i) a creative work of roughly 500-750 words – either a letter, a news article, research report etc – written from the perspective of a future from which we've solved an issue

of ethics, science, and technology (you can additionally create works of art in other mediums for this), ii) a reflection essay on your creative imagining of the future that draws on the themes, discussions, and readings we've covered, which analyzes and explains your creative work in engagement with class material.

Final course grades will reflect the following scale:

A=90%+ B=80-89% C=70-79% D=60-69% F=0-59

LATE WORK & EXTENSIONS POLICY

I understand that college life gets busy sometimes, so late work will be accepted with a 20% grade deduction, as well as an additional letter-grade penalty for every additional 24 hours. That means that if you submit your 100% work within 24 hours after the deadline, it will be given an 80% grade (a B grade) which will be reduced to a C grade the next day. If you have a reasonable and valid reason for late submission, please reach out to me beforehand to arrange for an **extension**.

VI. Course schedule

❖ **Reading responses due the night before the day the reading is scheduled for class**

Introduction		
Week 1	T 8/18	Greetings and Syllabus overview
	TR 8/20	Why ethics and science? <u>Read:</u> Briggie and Mitcham, <i>Ethics and Science</i> , p. 1-13
UNIT 1: What is ethics?		
Week 2	T 8/25	Ethical Theories: Deontology <u>Read:</u> Briggie and Mitcham, <i>Ethics and Science</i> , p. 51-57
	TR 8/27	Ethical Theories: Consequentialism / Utilitarianism <u>Read:</u> Briggie and Mitcham, <i>Ethics and Science</i> , p. 46-50
Week 3	T 9/1	Ethical Theories: Virtue Ethics / Care ethics <u>Read:</u> Briggie and Mitcham, <i>Ethics and Science</i> , p. 41-46
	TR 9/3	What does or can science say about ethics <u>Read:</u> Briggie and Mitcham, <i>Ethics and Science</i> , p. 174-180, 190-193
UNIT 2: What is science?		
Week 4	T 9/8	Science: social, moral, or value-free <u>Read:</u> Briggie and Mitcham, <i>Ethics and Science</i> , p. 66-76

	TR 9/10	Read: Briggie and Mitcham, <i>Ethics and Science</i> , p. 76-86
Week 5	T 9/15	Read: Sarewitz, "Saving Science"
	TR 9/17	Read: Longino, <i>Can there be a Feminist Science</i> , p. 1-13
UNIT 3: Science and ethics of animals and human beings		
Week 6	T 9/22	Read: Briggie and Mitcham, <i>Ethics and Science</i> – "Research ethics III: science involving animals" p. 156-...
	TR 9/24	Read: Lori Gruen, <i>Ethics and Animals</i> , "Why Animals Matter" p. 34-44
Week 7	T 9/29	Read: Peter Singer – "Voluntary Euthanasia: A Utilitarian Perspective"
	TR 10/1	Read: Hans Jonas, <i>Philosophical Reflections on Experimenting with Human Subjects</i>
Week 8	T 10/6	Read: Ruha Benjamin, <i>Viral Justice</i> – "Trust", p. 225-230, p. 254-259
	TR 10/8	Mid-term exam (take-home & open-note) – open Wednesday 10/7 and due Sunday 10/11
UNIT 4: Science, Politics, and Technology		
Week 9	T 10/13	Read: Briggie and Mitcham, <i>Ethics and Science</i> , p. 210-218, p. 225-228
	TR 10/15	Read: Langdon Winner, <i>Do Artifacts Have Politics?</i> , p. 1-8

Week 10	T 10/20	<u>Read:</u> Langdon Winner, <i>Do Artifacts Have Politics?</i> , p. 8-16	
	TR 10/22	<u>Read:</u> Bruno Latour, <i>Science in Action: How to follow scientists and engineers through society</i> , p. 1-13	
UNIT 5: Climate Science and Ethics			
Week 11	T 10/27	<u>Read:</u> David Wallace-Wells, “The Uninhabitable Earth”	
	TR 10/29	<u>Read:</u> NYT article, Jon Gertner – “Is it OK to Tinker with the Environment to Fight Climate Change?” <u>Watch:</u> TEDTalk, David Keith – “A Critical Look at Geoengineering against Climate Change”	
Week 12	T 11/3	<u>Read:</u> Naomi Oreskes, Erik M Conway – “The Collapse of Western Civilization: A View from the Future”	<u>1. Organize group presentation</u> <u>2. Final project topic</u>
	TR 11/5	<u>Read:</u> Ozzie Zehner – “The Alternative Energy Fetish”, Ch. 8 in <i>Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism</i> p. 149-158	
Week 13	T 11/10	<u>Read:</u> Ozzie Zehner – “The Alternative Energy Fetish”, Ch. 8 in <i>Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism</i> , p. 159-169	
	TR 11/12	<u>Read:</u> Aeon essay – “The looting of science fiction” Wrap-up discussion	
Week 14	T 11/17	Group presentations	
	TR 11/19	Group presentations	
Week 15	T 11/24	Thanksgiving Break – No Class!	
	TR 11/26		

Week 16	T 12/1	Group presentations
	TR 12/3	Group presentations

❖ **Final project due Tuesday, December 8th**

UNT Core Rubric
Rubrics for Reading and Writing • Reading Level 1 - skimming without understanding or being able to summarize Level 2 - grasping isolated points here and there Level 3 - having a systemic understanding that grasps the basic order of the piece at hand Level 4 - understanding not just the logic and structure of the argument, but also penetrating beneath it to see the assumptions that guide and frame it. Level 5 - being able to integrate the material into your life and use it in the world; seeing the world anew as a result of being transformed by the reading. • Writing 1. Grammar, syntax, diction, spelling ○ Well-formulated sentences, paragraphs, and sections ○ Thoughtful, appropriate, and precise word choice ○ Words spelled correctly , no basic grammatical errors 2. Organization/structure: ○ Clear statement of purpose/thesis ○ Informs reader of what essay will accomplish ○ Logically organized, good transitions, coheres as a whole 3. Scholarship Adequate research of relevant resources (appropriate content included) Follows stated format guidelines Appropriate tone and style for intended audience, clean presentation 4. Critical thought, assessment, and originality Comprehension of material, demonstrated grasp of key concepts Well-reasoned and supported arguments and interpretations Analysis stays focused and builds on itself, does not wander or fade Insightful questions

VII. Academic Integrity

Students caught cheating or plagiarizing will receive a "0" for that particular assignment or exam. Additionally, the incident will be reported to the Dean of Students, who may impose further penalty.

According to the UNT catalog, the term "cheating" includes, but is not limited to:

- a. use of any unauthorized assistance in taking quizzes, tests, or examinations;
- b. dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
- c. the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university;
- d. dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s); or
- e. any other act designed to give a student an unfair advantage.

The term "plagiarism" includes, but is not limited to:

- a. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and
- b. the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

AI policies

In this course, I want you to engage deeply with the materials and develop your own critical thinking and writing skills. For this reason, the use of Generative AI (GenAI) tools like Claude, ChatGPT, and Gemini is not permitted. While these tools can be helpful in some contexts, they do not align with our goal of fostering the development of your independent thinking. Using GenAI to complete any part of an assignment, exam, or coursework will be considered a violation of academic integrity, as it prevents the development of your own skills, and will be addressed according to the [Student Academic Integrity](#) policy.

If you choose to use Grammarly or similar tools for spelling and minor grammar edits, you must submit a clean draft – mistakes and all – as well as a final version that discloses what program you used and how. **Given the possibility of false positives, I strongly suggest drafting your work with 'track changes' feature on in word or through a Google doc with version history that clearly shows your writing process.**

UNT Policy statements

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at <http://deanofstudents.unt.edu>.

Accommodations for students with disabilities (ADA statement)

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to

implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website at <https://studentaffairs.unt.edu/office-disability-access>. You may also contact ODA by phone at (940) 565-4323.

Inclusivity, chosen names, and pronouns

UNT students represent a variety of backgrounds and perspectives. The professor is committed to providing an atmosphere for learning that respects diversity. In the classroom and online, students are expected to

- share their unique experiences, values and beliefs
- be open to the views of others
- honor the uniqueness of their colleagues
- value each other's opinions and communicate in a respectful manner
- keep confidential discussions that the community has of a personal nature

Chosen Names: A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. You can also change your display name in your Canvas account settings.

Pronouns: Pronouns (she/her, they/them, he/him, etc.) are a public way for people to address you, much like your name, and can be shared with a name when making an introduction, both virtually and in-person. Just as we ask and don't assume someone's name, we should also ask and not assume someone's pronouns. You can [add your pronouns to your Canvas account](#) so that they follow your name when posting to discussion boards, submitting assignments, etc.

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct. Federal laws and UNT policies prohibit discrimination on the basis of sex as well as sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking and/or sexual assault, there are campus resources available to provide support and assistance. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565-2648. Visit [Title IX Student Information](#) for more resources.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Blackboard online system, including grading information and comments, is also stored in a safe electronic environment for one year. You have a right to view your individual record; however, information about your records will not be divulged to other individuals without the proper written consent. You are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the university's policy in accordance with those mandates at the following link: <http://essc.unt.edu/registrar/ferpa.html>

Student Perceptions of Teaching (SPOT)

Student feedback is important and an essential part of participation in this course. The Student Perceptions of Teaching (SPOT) is a requirement for all organized classes at UNT. This short survey will be made available at the end of the semester to provide you with an opportunity to evaluate how this course is taught.