

CSCI 315E

Instructors:

Dr. Rob Smith
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SS 413
Office hours: Please email for appointment

TA

N/A

Learning outcomes:

This course introduces the basics of ethical reasoning and argumentation as a basis for understanding the ethical dilemmas faced by computer scientists. The course introduces students to the professional code of ethics used by computer scientists, legal issues involved in technology, and the social implications of computers, computing, and other digital technologies.

During this class, you will:

- Understand, identify, and apply different ethical philosophies, frameworks, and methodologies.
- Identify and interpret the codes of professional conduct relating to the disciplines of computer science and software engineering.
- Analyze the local and global impact of computing on individuals, organizations, and society.
- Understand and apply the concepts and principles of moral thinking to problems relating to computing and digital technologies.
- Improve your skills writing argumentative essays and pieces, and in critical thinking, analysis, and presentation.
- Become familiar with the field of cyberethics.

This class also satisfies the [UM upper-division writing requirement](#), [ethics and human values requirement](#), and [Computer Science major requirement](#).

Tentative schedule:

WEEK	Lecture	Due Sunday @ 11:59pm
Aug 19 - 21	Truth and reality	Video – Watch “Principles For Success by Ray Dalio (In 30 Minutes)” (on youtube)
Aug 24-28	Beliefs and observations	Essay – Why ethics matters

Aug 31 – Sep 4	Accuracy, honesty, opinions	Essay – Opinion vs. rational conclusion. -> draft
Sep 7 – Sep 11	Ethics and morality	Essay – Opinion vs. rational conclusion. -> peer review
Sep 14 – Sep 18	Principles	Essay – Opinion vs. rational conclusion. -> final
Sep 21 – Sep 25	Catch up	Essay – Good and evil
Sep 28 – Oct 2	Critical thinking, logical fallacies, human bias, counterfeit reasoning	Essay – Agree to disagree OR Logical Fallacies
Oct 5 – Oct 9	Case study: Ethics in data mining.	Essay – Consequences and ethics.
Oct 12 – Oct 16	Case study: Automation, complexity, and unemployment	Essay – Data mining and truth seeking
Oct 19 – Oct 23	Case study: Automation, complexity, and unemployment	Essay – Automation, complexity, and employment
Oct 26 – Oct 30	Case study: Automation, complexity, and unemployment	
Nov 2 – Nov 6	Case study: Diversity in tech	
Nov 9 – Nov 13	Case study: Intellectual property in tech	
Nov 16 – Nov 20	Case study: Ethics of use of technology you create	

Grades:

Lecture attendance (40%)

9 Essays, weighted by page length (60%) **No late submissions.**

Meetings:

All lectures and labs will be facilitated via Zoom at the schedule date/times of the class. Attendance will be taken via Zoom.

<https://us02web.zoom.us/j/82860089367?pwd=bG1xdjcvaTU5d3VHSENmYm4zN0FrQT09password370165>

The scheduled classroom should be available at course times, but a) the instructor will not be present and b) students are encouraged not to use classrooms. If unavoidable, to follow all university policies regarding COVID (see below).

Text Book:

None. Here are two related books I can recommend for personal enrichment: *Asking the Right Questions* by Browne and Keeley, *Rise of the Robots* by Martin Ford, and *Principles* by Ray Dalio.

Cheating:

For the purposes of this course, cheating is defined as passing off the work of others as your own. Any form of collusion or dishonesty, as interpreted by instructors, will be prosecuted to the full extent allowable by University standards and may result in an automatic failing grade in the course.

Incompletes and Late Drops:

The university empowers instructors with discretion to approve incompletes or late drops (dropping the course after 45 days). I will not approve either as a means of avoiding a low grade or as a means of protesting course policies. Valid reasons include family emergencies, work complications, or registration issues, but I reserve the right of approval on a case-by-case basis.

Disabilities:

Eligible students with disabilities will receive appropriate accommodations in this course when requested in a timely way. Please contact us after class or in one of our offices. Please be prepared to provide a letter from your DSS Coordinator. For more information, visit the Disability Services website at <http://life.umt.edu/dss/>.

Changes to Syllabi:

The instructors reserve the right to modify syllabi and assignments as needed based on faculty, student, and/or environmental circumstances. If changes are made to the syllabus, amended copies will be dated and made available to the class.

Grading Scale:

A 93-100; A- 90-92; B+ 87-89; B 83-86; B- 80-82; C+ 77-79; C 73-76; D+ 67-69; D 63-66; D- 60-62; F < 60.

COVID Addendum:

The university has policy on meeting, masks, distancing, etc. Please read at umt.edu/coronavirus/

Essay Instructions

Submit all essays **AS A.docx** in an email to me with the assignment name in the subject. The first two lines of your document should be your name (right justified) and the assignment title (centered) as the first two lines of the document. Please make assignments single-spaced, 11 or 12 pt font. All essays will be graded using the rubric that follows these instructions.

Essay – Why ethics matters.

Length: 2 pages.

Topic: In your own words, describe a cohesive framework relating your idea of the concepts of truth, reality, beliefs, and ethics. Your framework should include an explanation of why the study and application of ethics matters. NOTE: Your ideas of these concepts do NOT have to coincide with viewpoints shared in class.

Special instructions: N/A

Essay – Opinion vs. rational conclusion. -> draft

Length: 2 pages.

Topic: Compare and contrast opinion vs. rational conclusion. Make sure you discuss: the value and validity of opinion vs rational conclusion, how each is formed, what is the difference between opinion and rational conclusion, and how you go about persuading someone in each case.

Special instructions: Email your draft to your peer and cc me for credit.

Essay – Opinion vs. rational conclusion. -> peer review

Length: N/A

Topic: N/A

Special instructions: Mark up your classmate's paper as if you were grading it. Use the rubric and also make corrections on the paper. Email feedback to peer and cc me for credit. For this assignment the grading rubric is: 100 – Engaged and useful feedback; 70 – Useful feedback; 30 – Submitted something; 0 – Submitted nothing.

Essay – Opinion vs. rational conclusion. -> final

Length: Same as original.

Topic: Same as original.

Special instructions: Submit to me normally, with or without edits based on feedback.

Essay – Good and evil.

Length: 3 pages.

Topic: Given the aspects of this topic discussed in class, your personal experiences, and any additional study you have conducted: What does good mean? What does evil mean? What is the process of discerning if something is good or evil? Make a rational argument for anything you propose.

Special instructions: None.

Essay – Agree to disagree OR Logical Fallacies

Length: 1-2 pages.

Topic: Choose ONE of the following:

1 - Address the question “Is it ever honest or rational to say ‘Let’s agree to disagree?’” Why does this matter? Make a rational argument for anything you propose.

2 - Find a news article of your choice. Write a rebuttal as you would see in the opinion section of a newspaper. Identify examples of fallacious reasoning. Describe what logical error was made, what information would be required to make the claim they do, what alternative explanations exist, etc.

Special instructions: None.

Essay – Consequences and ethics.

Length: 5 pages.

Topic: Explore the relationship between ethics and consequences. Can you have one without the other? How are they interrelated? What is the effect of dampening consequences in society? What are some factors that act to dampen consequences in society, and what are their costs and benefits?

Special instructions: None.

Essay – Data mining and truth seeking

Length: 3 pages

Topic: What should we do when best practices for truth seeking yields a result that is offensive to current sensibilities? Are there cases where the search for truth ought to be censored? If so, when and why? What should we do when something like data mining yields results that are politically incorrect? What is the cost/benefit of censorship of results vs. not? Is there any benefit to undesired discovery?

Special instructions: N/A

Essay – Automation, complexity, and employment

Length: 5 pages.

Topic: Given the aspects of this topic discussed in class, your personal experiences, and any additional study you have conducted: What problems does society face at the nexus of automation, employment, and engagement? What do you think can be done about these problems? If nothing can be done, explain why. Explore the cost and benefit and make a rational argument for anything you propose.

Special instructions: N/A

Writing Rubric:

Engagement - 20

20 - I would pay to read this.

10 - I would read this if it were free.

0 - I would read this if I were forced to.

Support and evidence - 50

50 - Ideas supported sufficiently; Support is sound, valid, and logical.

35 - Main points and ideas are only indirectly supported; support isn't sufficient or specific.

20 - Insufficient, non-specific, and/or irrelevant support.

0 - Clear absence of support for main points.

Structure and organization - 15

15 - Organization is sequential and appropriate; paragraphs are well developed and appropriately divided; ideas linked with smooth and effective transitions.

10 - Competent organization without sophistication.

0 - Organization was insufficiently present.

Grammar and vocabulary - 15

15 - Exceptional range, accuracy, punctuation, spelling, etc.

10 - Competent range, accuracy, punctuation, spelling, etc.

0 - Communication is inhibited due to grammar and vocabulary.