

CSCI 215e Social & Ethical Issues in Computer Science

Rubric: CSCI

Term: Autumn 2022

Number: 215e

Lecture: Online Format

Section: 51

CRN: 74834

Instructor Information

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Office Hours by appointment:

Day	Hours
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Course Description

Exploration of ethical issues in the field of computing. Skills needed to identify and analyze various ethical concerns. Standard ethical concepts and theories, methods of ethical analysis. Strong emphasis on practical application of the ethical process.

Aligns with CAE KU:

- Non-Technical Core: Policy, Legal, Ethics, and Compliance (PLE)

Course Outcomes

- Articulate both the positive and negative impacts of information technology on society
- Describe articulate ethical theories and logic and apply both to ethical dilemmas presented by information technology
- Identify appropriate standards of professional conduct, relationships, and accountability
- Discuss differences and similarities between personal, professional, and institutional conduct and accountability
- Analyze the complexities of online behavior, networked communications, and human/technology interactions

- Evaluate the complexity of issues related to security, surveillance, and informational privacy including personal and professional best practices
- Compare and contrast the basis of intellectual property, ownership, and sharing in the information age
- Describe the similarities and differences between law and ethics and gain knowledge of laws and regulation relevant to information technology
- Apply ethical standards to of interpersonal communication (both verbal and written), knowledge- sharing, and debate
- Compose written documents that are appropriate for a given audience or purpose.
- Formulate and express opinions and ideas in writing.
- Use writing to learn and synthesize new concepts.
- Revise written work based on constructive feedback.
- Find, evaluate, and use information effectively.
- Begin to use discipline-specific writing conventions.
- Demonstrate appropriate English language usage.

Topics Covered:

Unit	Topics	KU Topics	Assess
Technology, Ethics, and Law	<ul style="list-style-type: none"> • Introductions • Technological Evolution • Evolutions of Ethics and the Social Contract • Ethics vs. Law 		Quiz 1; Discussion Forum 1; Reflection Paper 1
Foundations in Ethics	<ul style="list-style-type: none"> • Absolutism (Deontology, Utilitarianism/Consequentialism, Virtue, Justice) • Relativism (Care, Ego, Culture) 		Quiz 2; Discussion Forum 2; Reflection Paper 2
Personal and Professional Ethics	<ul style="list-style-type: none"> • Avoiding Biases and Fallacies • Personal vs. Professional Ethics • Rights and Responsibilities • Professional Codes of Conduct 		Quiz 3; Discussion Forum 3; Analysis Paper Section 1
Information, Regulation, and Power	<ul style="list-style-type: none"> • History of the Internet • The Digital Divide • Tech Monopolies and Democracy • Net Neutrality 		Quiz 4; Discussion Forum 4; Reflection Paper 3
Expression and Censorship Online I	<ul style="list-style-type: none"> • Social Media • Freedom of Expression and Government Censorship • Social Media Censorship • Fake News and Misinformation 	<ul style="list-style-type: none"> • Federal Laws and Regulations • 	Quiz 5; Discussion Forum 5; Reflection Paper 4:
Expression and Censorship Online II	<ul style="list-style-type: none"> • Children and Technology Use • Video Games and Virtual Reality 	<ul style="list-style-type: none"> • COPPA 	Quiz 6; Discussion Forum 6; Analysis Paper Section 2
Intellectual	<ul style="list-style-type: none"> • What is Intellectual Property? 		Quiz 7; Discussion

Property	<ul style="list-style-type: none"> • The Ethics of Piracy • Artificial Intelligence and the Future of IP 		Forum 7; Reflection Paper 5
Information Privacy I	<ul style="list-style-type: none"> • Introduction to Privacy • Data Collection, Mining, and Brokerage • Surveillance Capitalism 	<ul style="list-style-type: none"> • BYOD • State, US, International Standards and Jurisdictions • HIPAA/FERPA • Sarbanes-Oxley • Gramm-Leach-Bliley 	Quiz 8; Discussion Forum 8; Reflection Paper 6:
Information Privacy II	<ul style="list-style-type: none"> • Health, Genetic, Medical Data • Regulation and privacy Protections • Data Dignity 		Quiz 9; Discussion Forum 9; Analysis Paper Section 3
Government Surveillance	<ul style="list-style-type: none"> • Government Surveillance and Data Collections • Smart Cities • Privacy vs. Security 	<ul style="list-style-type: none"> • PATRIOT Act 	Quiz 10; Discussion Forum 10; Reflection Paper 7: PATRIOT Act
Computer and Network Security	<ul style="list-style-type: none"> • Vulnerabilities and Staying Safe on the Internet • Cybercrime • The Ethics of Hacking 	<ul style="list-style-type: none"> • PCI DSS • Computer Security Act 	Quiz 11; Discussion Forum 11; Reflection Paper 8: Computer Security Act
Security and Reliability	<ul style="list-style-type: none"> • System and Software Errors and Failures • Best Practices for Reliable Systems 		Quiz 12; Discussion Forum 12; Analysis Paper Section 4
Introduction to AI	<ul style="list-style-type: none"> • Brief Introduction to Machine Learning • Algorithmic Bias 		Quiz 13; Discussion Forum 13
Social Issues and Artificial Intelligence	<ul style="list-style-type: none"> • Deepfakes and Fake People • Social Robots 		Quiz 14; Discussion Forum 14; Reflection Paper 9
Future of Work and Science Fiction Ethics	<ul style="list-style-type: none"> • Mechanization, UBI, and the Future of Work • Singularity, Paperclip Apocalypse • Science Fiction and Ethics • Machine Ethics 	<ul style="list-style-type: none"> • Americans with Disabilities Act 	Quiz 15; Discussion Forum 15; Reflection Paper 10: ADA Analysis Paper Section 5

Resources

Cyberethics: Morality and Law in Cyberspace. Richard A. Spinello. 2021. ISBN: 978-284-18406-8

All additional readings will be linked or made available on Moodle. While the goal is to decrease the cost of reading material for students it is possible that readings will occasionally require a payment. I will work to keep these costs at a minimum and to provide free readings or free alternatives to paid readings when possible.

Grading:

Reflection Papers

(25%): Over the course of the semester, you will be required to write a series (10 total) of reflection papers, which are expected to be at least 300 words in length each. Reflection papers will be based on prompts drawn from readings and topics discussed in class and will give you the opportunity to interact with important course themes on a deeper level. Reflection paper grading assessment rubric is available on the Moodle course page under the course information section and detailed instructions for each reflection paper will be located in the description for specific assignments. Please see the course outline at the bottom of this document for the due dates of reflection papers. You are encouraged to revise and resubmit reflection papers based on instructor feedback – if you choose to so, revisions are due the Friday following the original due date. Revised documents should be uploaded on Moodle at revisions should be highlighted or tracked.

Analysis Paper

(35%): In addition to write one Analysis Paper of at least 2500 words. This paper provides the opportunity to examine an ethical dilemma in greater depth and detail. Topics for the Analysis Paper will be chosen by students and must be based upon readings and topics discussed in class. An assessment rubric which further describes requirements for Analysis Paper will be provided along with the assignment instructions. A copy of the Program-level Writing Assessment Holistic Rubric for UM is available under the course information section of the course Moodle page.

In order to facilitate timely completion and ample time for revision and improvement, the Analysis Paper will be divided into five separate sections, due at intervals throughout the semester. Each component of the paper will be submitted separately and will receive a round of feedback from the instructor. Students are required to revise these assignments according to instructor comments and compile the assignments into a cohesive final draft that is due the last day of class.

All manuscripts must demonstrate writing competency at the proficient or advanced level. Papers not meeting this criterion are required to be rewritten. Please see the course outline at the bottom of this document for the due dates of analysis paper assignments.

Quizzes

(25%): Quizzes will be completed to assess comprehension of reading content. All quizzes must be completed by Friday at 11:55 pm of the week they are due.

Final Exam

(15%): A comprehensive exam will be completed to assess course content at the end of the semester.

Late Work Policy

Assignments are due Friday at 11:59 pm. With instructor consent, you may turn in reflection papers and analysis paper assignments until the Sunday of the week they are due for a 10% deduction for each day you are late. Revisions on reflection papers will not be accepted late (e.g. they due the Friday following the original due date). Quizzes close on Fridays at 11:59 pm. If you need additional time please contact me and arrange to have the quiz reopened. Late quizzes must be completed by the Sunday of the week

they are due and are subject to a 10% penalty for each day they are late. The final analysis paper and final exam will not be accepted late.

Grading Scale:

Assessment Area Weighting	Grading Scale
Reflection Papers 25%	90-100% A
Analysis Paper 35%	80-89% B
Quizzes 25%	70-79% C
Final Exam 15%	60-69% D

Assessment areas will be weighted as described and the following grading scale will be applied:
The instructor reserves the right to use +/- modifiers when deemed necessary.

Disability Statement

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and the Office for Disability Equity (ODE). If you anticipate or experience barriers based on disability, please contact the ODE at: (406) 243-2243, ode@umontana.edu, or visit www.umt.edu/disability for more information. Retroactive accommodation requests will not be honored, so please, do not delay. As your instructor, I will work with you and the ODE to implement an effective accommodation, and you are welcome to contact me privately if you wish.

Scholarly Conduct

- All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code.
- Plagiarism, cheating, or direct use of online resources without proper attribution will result in a deduction of points no less than 20% of the total points for the assignment to a zero on the assignment at the instructor's discretion.
- All students are expected to respect the opinions and dignity of all members of the class and act in a dignified manner.
- Every effort will be made to accommodate disabilities. Please inform me of any issues.

Collaboration

Using the Web to research materials and concepts is an integral part of learning in the twenty-first century. Studying with other students is a productive method of learning. A certain amount of collaborating on concepts with other students and using resources found on the Internet in an assignment is recommended. Copy and paste is not acceptable. It is expected that each student will input his/her assignment into the computer, and each student must be able to explain any assignment turned in.

Collaboration on exams is strictly forbidden.