

University of Montana

ScholarWorks at University of Montana

University of Montana Course Syllabi

Open Educational Resources (OER)

Spring 1-2016

CSCI 215E.50: Social and Ethical Issues in Computer Science

John T. Taber

University of Montana - Missoula, john.taber@umontana.edu

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

Let us know how access to this document benefits you.

Recommended Citation

Taber, John T., "CSCI 215E.50: Social and Ethical Issues in Computer Science" (2016). *University of Montana Course Syllabi*. 4038.

<https://scholarworks.umt.edu/syllabi/4038>

This Syllabus is brought to you for free and open access by the Open Educational Resources (OER) at ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana Course Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

The University Of Montana
Missoula College
Department of Applied Computing and Electronics
Course Syllabus

CSCI 215E Social and Ethical Issues in Computer Science

Sections 50

Credits: 3

Prerequisites: WRIT 101 College Writing

Syllabus Last Revised: January 22, 2016

Faculty Contact

Dr. John Taber, Adjunct Professor

John.Taber@Umontana.edu

Office Hours: Tues,Thurs 14:00-16:00

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.

Course Overview

Social and Ethical Issues in Computer Science studies ethical decision making in the complex world of information technology. The course begins with a survey of general ethical principles and decision making processes, examining effective tools and guidelines to resolve complex dilemmas. The remainder of the course explores information technology-specific ethical issues. Included will be discussions on professionalism involving business relationships, codes of ethics, accountability and licensure; intellectual property including patents copyrights, and trade secrets; online behavior including SPAM, hacking, and social engineering; and privacy issues such as data mining, surveillance, and transaction generated information.

In addition to the ethical component of the course, CSCI215E fulfills a lower division writing requirement. Assignments focus on basic grammar, sentence structure, mechanics (capitalization and punctuation), paragraph structure, topic sentences, thesis statements, and introductory and closing paragraphs.

This course explores ethical issues in the field of computing. Students will develop the skills needed to identify and analyze various ethical concerns. We will cover standard ethical concepts and theories, as well as standard methods of ethical analysis. I place a strong emphasis on practical application of the ethical process.

This means that once you've learned the basics of ethical analysis, you'll apply that information to different scenarios. It's important to keep in mind that the field of ethics considers many different viewpoints. A good ethicist will fairly evaluate positions that may, on a personal level, be far outside his or her comfort zone. I expect you to become good ethicists! Your ethical analysis work will usually be in the form of an essay, so you'll practice your writing skills at the same time that you practice your ethics skills. Initial writing assignments will work on grammar, punctuation, and sentence structure. In short order, we'll move to topic sentences and paragraph structure, then expand to a full essay with introduction, body text, closing, and thesis statements. Once we reach that point in the assignments, you'll continue using that format for the remainder of the semester.

This course requires reading, writing, reflection, and critical thinking! Each week expect to read around 50 pages and write at least one page.

Learner Outcomes

- Explain the positive impact of computers on society;
- Explain the potential negative impact of computers on society;
- Explain legal issues related to computing;
- Describe professionalism and code of ethics;
- Discuss post-9/11 legislation as it relates to computing including the USA Patriot Act
- Identify and describe common ethical concepts and theories.
- Analyze ethical dilemmas and articulate a clear, descriptive account prior to forming a normative course of action.
- Demonstrate one or more processes of philosophical analysis.
- Identify common ethical issues facing professionals in the field of information technology.
- Apply ethical concepts and an analytical process to common dilemmas found in the information technology field.
- Demonstrate writing competency in the following areas: development of idea, organization, appropriate voice, proper mechanics, and relevance to assignment

General Education

CSCI 215E is a designated lower division writing course. It also fulfills the Ethical and Human Values Perspective 5 General Education Graduation Requirement as defined in The University of Montana Catalog.

Textbook

Quinn, M. J. (6th Edition). *Ethics for the information age*. Upper Saddle River, NJ: Addison-Wesley. ISBN 978-0-13-213387-6

Adelson, H., Ledeen, K., & Lewis, H. (2008). *Blown to bits: Your life, liberty, and happiness after the digital explosion*. (1st ed.). Addison-Wesley. ISBN 978-0-13-285553-2

Download PDF Format through Creative Commons Licensing: <http://www.bitsbook.com/excerpts/>

Reading

This course contains a significant volume of reading. Students are expected to complete a weekly reading assignment. Reading will be assessed through classroom participation, writing assignments, and the final exam.

Assessment

Grades will be weighted and graded as follows:

Assessment Area Weighting:		Grading Scale:			
Participation	10%	97-100%	A+	77-79	C+
Weekly Reflection Paper (10)		93-96	A	73-76	C
Analysis Paper (2)	40%	90-92	A-	70-72	C-
		87-89	B+	60-69	D
		83-86	B	Below	F
		80-82	B-		

Academic 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. The Code is available for review online at: http://life.umt.edu/vpsa/student_conduct.php

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.

The subject of plagiarism is discussed in Appendix A of the Quinn textbook (p. 491). Please be sure to review this section of the textbook prior to submitting any assignments for the course.

Writing Requirements

Students are expected to demonstrate writing competency in the following areas: development of idea, organization, appropriate voice, proper mechanics, and relevance to assignment. Writing will be assessed using reflection papers and analysis papers.

All writings are to be completed using a word processor. Papers must be double-spaced, contain a page number in the upper right-hand corner, and use the APA style for citations and references. For analysis papers, a cover page (see Appendix B) and a reference page are required. No running headers. Use twelve (12) point Times New Roman or Arial font style. Examples of general APA format can be found at the Purdue Online Writing Lab <https://owl.english.purdue.edu/owl/resource/560/01/>. The Mansfield Library provides an APA Citation Style Guide: <http://libguides.lib.umt.edu/content.php?pid=3183&sid=17365>.

In most cases, a third person narrative voice should be used in all writings. Prior to final submission, all papers are required to complete the following process: final review by author, revision, peer review, revision and final submission.

An example cover page is found in the syllabus appendices. All writing assignments are due at the start of class.

Reflection Papers

This course requires students to write a weekly reflection paper based upon a topic covered in readings from the Quinn textbook and discussion topics developed in the classroom. Ten (10) reflections papers are required. No title page is needed for reflection papers, rather "Your Name" and "Reflection Paper #xx" should be included on separate lines, single-spaced, in the upper right header of the document. Be sure to include references where needed.

Please write using a third person voice. The expected length of a reflection paper is 300-400 words (approximately 1 page double-spaced). Citing reference using APA citation style is required. Consider a format similar to a newspaper editorial. Reflection papers are assessed as follows:

Superior (A 5pts) indicates the submission meets the minimum length, contains limited grammar/spelling/mechanical errors, and uses strong logic. 5 points

Good (B 4 pts) - good not great effort

Fair (C 3 pts) - bare minimum

Poor (D 1 pt) - really poor effort

Fail (F 0 pts) - Not Submitted

Analysis Papers

Analysis Papers provide students the opportunity to examine an ethical dilemma in greater depth. Topics for Analysis Papers will be based upon readings from the in the Submissions are 1200-1500 words in length. A minimum of two analysis papers are required each semester. Citing reference using APA citation style is required. Use third person voice. Title page, Reference page, and APA citation style is required.

A grading rubric for analysis papers is found in syllabus Appendix B

Dropping and Adding Courses or Changing Sections, Grading or Credit Status

University Policy for dropping courses or requesting grading/credit status changes can be found in the catalog: <http://www.umd.edu/catalog/acad/acadpolicy/default.html> Students should become familiar with all academic policies found in the catalog.

Disability Accommodations:

Eligible students with disabilities will receive appropriate accommodations in this course when requested in a timely way. Please contact me if you will be requesting an accommodation. Please be prepared to provide a letter from your DSS Coordinator. For more information, visit the Disability Services website at <http://www.umd.edu/dss> or call/text 406.243.2243.

Good luck this semester and I hope you enjoy the course!

Topic Outline (subject to revision)

1. Catalyst for Change
2. Introduction to Ethics
3. Networked Communications
4. Intellectual Property
5. Privacy I: Information Privacy
6. Privacy II: Government
7. Security
8. Reliability
9. Professional Ethics
10. Work and Wealth

Appendix A: Curriculum Calendar - Spring Term 2016

Week		Reading Assignment	Writing Assignment
1	Jan 25	Quinn - Chapter 1 Catalyst for Change pp.1-42	Reflection Paper 1 (RP1)
2	Feb 1	Quinn - Chapter 2 Introduction to Ethics pp.51-98	RP 2
3	Feb 8	Quinn - Chapter 10 Work and Wealth pp.447-478	RP 3
4	Feb 15	Quinn - Chapter 3 Networked Communication pp. 109-148	RP 4
5	Feb 22	Quinn - Chapter 4 Intellectual Property pp. 161-212	RP 5
6	Feb 29	Quinn - Chapter 5 Information Privacy pp. 227-253	RP 6
7	Mar 7	Abelson, Ledeen, and Lewis - Chapter 1 The Digital Explosion and Chapter 2 Naked in the Sunlight	Start on Analysis Paper #1
8	Mar 14	----	Analysis Paper #1
9	Mar 21	Quinn - Chapter 6 Privacy and Government	RP 7
10	Mar 28	Spring Break	No Assignment
11	Apr 4	Quinn - Chapter 7 Computer and Network Security pp. 315-346	RP 8
11	Apr 11	Abelson, Ledeen, and Lewis - Chapter 4 Needles in the Haystack (pp. 109-160), or Chapter 6 Balance Toppled (pp. 195-228) or Chapter 7 You Can't Say That on the Internet (pp. 229 - 257)	Analysis Paper #1 Rewrite
12	Apr 18	Quinn - Chapter 8 Computer Reliability pp. 355-393	RP 9
13	Apr 25	Quinn - Chapter 9 <i>Professional Ethics</i> pp. 403-437	Analysis Paper #2
14	May 2	Quinn - Chapter 9 Professional Ethics pp. 403-437 Chapters 4 - Needles in the Haystack (pp. 109-160), 6 - Balance Toppled (pp. 195-228), or 7 - You Can't Say That on the Internet (pp. 229 - 257) from Blown to Bits.	RP 10
No Final Exam			

Appendix B: Analysis Paper Grading Rubric

Name:	Score: (max 50 points)
	<p>Understand the content found in the assigned readings and identify the ethical dilemma. Demonstrate a strong understanding of the content and clearly identify multiple ethical dilemmas (5 points). Demonstrate some understanding of the content and partially identify at least one ethical dilemma (3 points). Demonstrate a limited or no understanding of the content or dilemma (1 point).</p>
	<p>Identify the multiple perspectives and stakeholders associated with an issue Identify more than one perspective on an issue (5 points). Identify a singular perspective on an issue (3 points). Inability to provide a definite perspective on an issue (1 point).</p>
	<p>Use of ethical philosophy in forming an argument Examine an issue through the use of multiple ethical philosophy (5 points). Examine an issue using a singular ethical philosophy (3 points). No use of ethical philosophy is found in the texts (1 points).</p>
	<p>Use of analogies and/or examples in illustrating a dilemma Writer has provided numerous examples or analogies to illustrate the dilemma (5 points). Writer has provide at least one example or analogy to illustrate the dilemma (3 points). Writer has not used a single example or analogy to illustrate the dilemma (1 point)</p>
	<p>Compose written documents that are appropriate for a given audience or purpose (Learning Outcome 1) The texts show a strong sense of purpose and audience. (5 points) The texts show some attention to purpose and audience (3 points) The texts show little understanding of purpose and/or audience (1 point)</p>
	<p>Formulate and express opinions and ideas in writing (Learning Outcome 2) Expression of ideas is articulate, developed, and well-organized. (5 points). Expression of ideas may be vague, unclear, and/or unorganized at times (3 points). Expression of ideas is confusing, minimal, or irrelevant; the organization is illogical or weak (1 point).</p>
	<p>Use writing to learn and synthesize new concepts (Learning Outcome 3) These texts demonstrate an ability to synthesize concepts (5 points). These texts demonstrate developing ability to synthesize concepts. (3 points) These texts demonstrate difficulty in synthesizing concepts. (1 point).</p>
	<p>Find, evaluate, and use information effectively (Learning Outcome 5) The texts consistently show the writer's ability to evaluate and use information effectively (5 points). The texts reveal the writer's uneven ability to use information; use of information may be insufficient (3 points). The writer's use of information is inaccurate, inappropriate, or missing (2 points)</p>
	<p>Appropriate use of APA writing conventions (Learning Outcome 6) Demonstrate APA writing conventions with general success (5 points). Demonstrate minimal knowledge of APA writing conventions (3 points). Demonstrate little to no awareness of APA writing conventions (1 point).</p>
	<p>Demonstrate appropriate English language usage (Learning Outcome 7) While there may be a few errors in grammar, usage, and mechanics, a strong command of English language usage is clearly evident (5 points). A basic control of English language usage is apparent, even though frequent errors in grammar, usage, or mechanics may occasionally hinder understanding (3 points). Severe problems with grammar, usage, and mechanics show poor control of English language</p>

	and impede understanding (1 points).
--	--------------------------------------

Appendix C: Cover Page Example

|

Assignment Name

by
Student Name

Submitted to
Prof. John Taber

In Partial Fulfillment of Requirements for
CSCI 215E Societal and Ethical Issues in Computer Science

The University of Montana
Spring 2016