Social and Professional Issues in Computing COSC 3315-06 Course Guidebook

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Contents

SOCIAL AND PROFESSIONAL ISSUES IN COMPUTING COSC 3315-06 COURSE GUIDEBOOK

Course Description

Introduction to the social and professional issues that arise in the context of computing.

Mission

The mission of this course is to address many of the myriad social and ethical concerns which arise from the use of advanced technologies, including artificial intelligence, machine learning, blockchain technology, 5G, robotics, digital weapons, and facial recognition. We will also examine various views of a "profession" and "professional conduct" in computer science and information systems. Finally, we will explore issues in "empathic technology."

Course Objectives

By the time you complete this course, you should be able to

1. Describe the basic components of ethical reasoning
2. Consider what ethical decisions you would make throughout the various scenarios
3. Describe the basic principles of significant moral theories
4. Explain how theorists define the constituents of a profession
5. Explain what defines a professional
6. Explain how advances in technology call for new privacy protection laws
7. Explain how the Internet has affected intellectual property laws
8. Describe best practices on how to help prevent computer failures
9. Explain how social networking sites and online games have the potential to change an individual's self-concept from a single 'true' self to multiple explicit personas

10. Explain how current free speech laws are interpreted when applied to recent methods of expression
11. Describe how the arguments of theorists are applied to protect vulnerable members of society
12. Explain what it means for a technology to be pervasive and for it to be autonomous
13. Discuss how empathy is built in a tech-obsessed world

Course Pre-Requisite

COSC 1337 or COSC 1437. The student is expected to have taken a foundational course in college-level composition and have a working knowledge of Microsoft Word and PowerPoint.
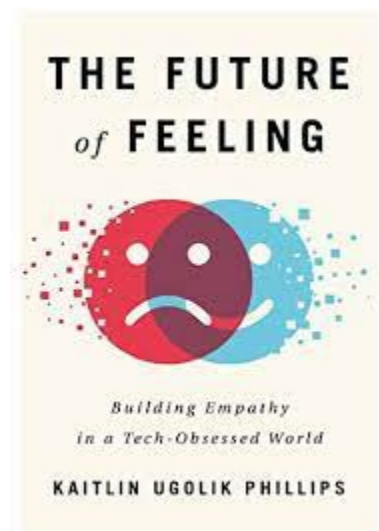
Textbook

The Future of Feeling: Building Empathy in a Tech-Obsessed World, by Kaitlin Ugolik Phillips, Published 2020

Any of these ISBNs will be acceptable:

- ISBN-13: 9781542041843 (hardcover)
- ISBN-10: 1542041848 (hardcover)
- ISBN-13: 9781542041850 (paperback)
- ISBN-10: 1542041856 (paperback)

Also available in Kindle eBook edition (with text-to-speech enabled) on Amazon [and free if you have Kindle Unlimited]

This book will not be needed until the week of February 20.

Course Organization

This course is organized into Modules. Here's what a typical module may include:
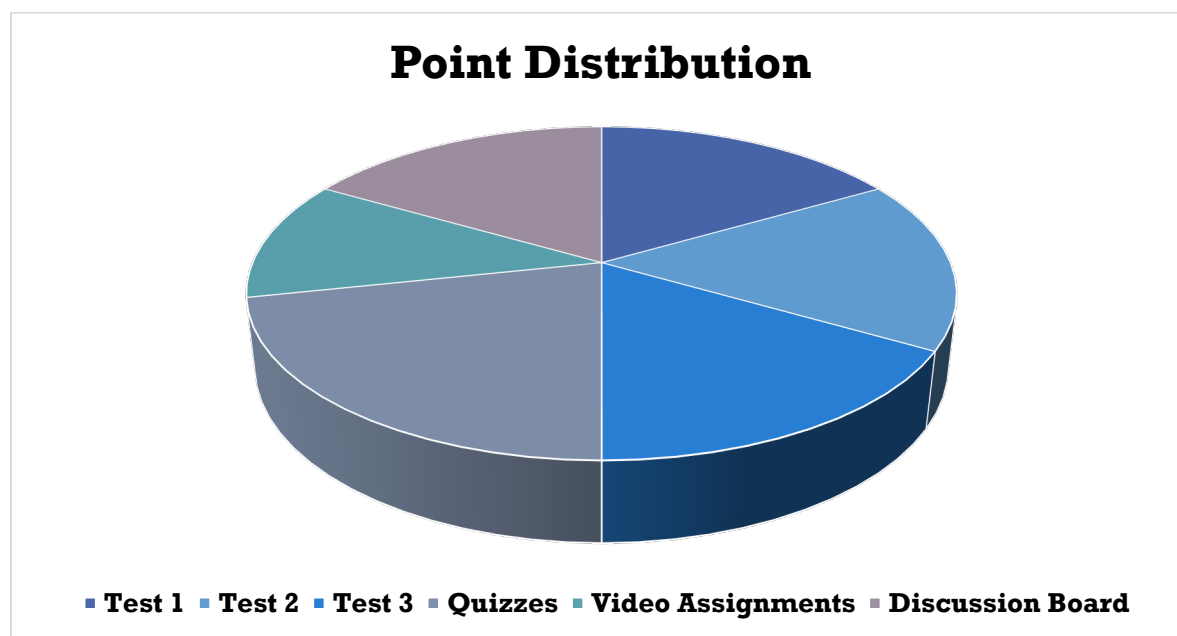
- Video lecture
- Reading assignment (from the textbook, not until February 20)
- Supporting materials
    - Lectures and slides (pdf)
    - Handouts (pdf)
    - Videos
    - External links
- Assignments
    - Quizzes
    - Discussion boards
    - Videos (only twice during the semester)

Grading

Here are the sources for your grades:

Type of Assignment	How Many Assigned	Points Possible
Test 1		100
Test 2		100
Test 3		100
Quizzes	13 x 10 pts	130
Video Assignments	2 at 35 pts each	70
Discussion Board	10 at 10 pts each	100
Total Possible Points		**600**

Here is a visual representation of how course points are distributed:

At the end of the semester

- Your total points will be added together to obtain the sum
- The sum will be divided by 600, the total possible points
- That value will be multiplied by 100 and compared to this table

Semester Percent	Grade
90-100	A
80-89	B
70-79	C
60-69	D
<60	F

Assignments

There are three types of assignments in this course:

- **Quizzes** over the material covered during the week
- **Discussion Boards** to support an open discussion of relevant topics
- **Video Assignments**, of which there are only two, were students will prepare a simple 2-to 5-minute video about a topic of interest related to the course

Quizzes

Quizzes are open notes, open book, open lecture and you will have two chances to complete the quiz. There is no time limit for taking a quiz, but they are due one week from the day they are made available. Quizzes will have multiple choice, true/false, and matching questions and you will receive your grade immediately after the quiz is complete.

Discussion Boards

Discussion board assignments give everyone an opportunity to all of you to share your diverse viewpoints and experiences related to the topic of the week. Your posts can include photos and links if they stay on topic.

Netiquette

Here are the basic rules for online discussion boards you will be expected to follow in this course:

- Stay on topic.
- No personal attacks.
- Do not type in ALL CAPS – it is the online equivalent of screaming
- Remember that tone does not translate well online: avoid writing in a way that someone could interpret as angry or sarcastic
- Respect the opinions and viewpoints of your classmates.
- When you disagree, do so in a respectful manner and make
- If you refer to something said earlier in the discussion, take a minute to quote just a few key lines so others will not have to reread the entire thread to figure out your post or comment
- Some may be new to English. Be forgiving when spelling or grammatical errors occur

Rubric

Here is an example of a rubric, or grading tool, that will be used for discussion board assignments.

Criteria	Possible Points
Instructions followed	3
Comment on another post made	2
Remains on-topic	2
Follows Netiquette	3

Video Assignments

There will be two video assignments for the course for which you will need to record a very short video (between 2 and 5 minutes) discussing one of the topics provided. More details will be provided during the semester.

Here an example of a rubric for a video assignment:

Criteria	Possible Points
Begins with introduction of yourself and your topic	10
Discussion flows logically	10
Presentation of material is engaging	5
Conclusion	10
Instructions followed	5
Remains on-topic	2
Falls within length requirements	3

Communication

Office hours held virtually by using Zoom, and you are not required to have your camera on. Contact me through Canvas and we can find a time that works well for both of us.

Course Schedule

Here is the course schedule.

DATE	MODULE	ACTIVITIES
Aug 21		Course Introduction
Aug 28	1	Introduction to Ethics Quiz 1, Discussion Board 1
Sept 4	2	ACM Code of Ethics Quiz 2, Discussion Board 2
Sept 11	3	Intellectual and Intangible Property Quiz 3, Discussion Board 3
Sept 18	4	Establishing a Culture of Trust Quiz 4, Discussion Board 4
Sept 25	5	Cybersecurity Quiz 5, Discussion Board 5 Test 1
Oct 2	6	Textbook, Chapters 1 -2 Quiz 6, Discussion Board 6
Oct 9	7	Textbook, Chapters 3 – 4 Quiz 7, Discussion Board 7
Oct 16	8	Textbook Chapters 5 – 6 Quiz 8, Discussion Board 8
Oct 23	9	Textbook Chapters 7 – 8 Quiz 9, Discussion Board 9
Oct 30	10	Ethical Issues with AI Quiz 10, Discussion Board 10 Test 2
Nov 6	11	IIoT, Industry 4.0 and Autonomous Systems Quiz 11, Discussion Board 11
Nov 13	12	Autonomous Vehicles Quiz 12, Discussion Board 12
Nov 20		Thanksgiving Holiday
Nov 27	13	Ethical issues in Gaming Quiz 13, Discussion Board 12
Dec 4		Finals week, Test 3