IS 350 - Computers, Society & Ethics

Weekly meetings: Monday and Thursday, 1:00 PM - 2:20 PM
Office Hours: Monday and Thursday, 12 PM - 1 PM GITC3901C
Instructor: Chenxi Yuan
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Prerequisites

As prerequisites, IS 350 requires an introductory course in computing, an introductory course in the social sciences, and HUM 101. This course is an upper-level course designed for juniors and seniors.

Course Goals

Upon the completion of this course, you should be able to:

1. Explain beneficial and detrimental ways in which computing affects people, including the primary and secondary effects, and intended and unintended consequences.
2. Utilize theories of ethical decision-making and professional codes of ethics to analyze difficult situations with computing aspects.
3. Find and critically evaluate relevant literature pertaining to a situation of concern.
4. Communicate about difficult issues in the computing sciences.

This is an ambitious set of goals, which meets several of the requirements for an ABET accredited degree in the Computing Sciences.

Course Format

We meet for discussion, lectures and other activities usually once or twice a week for day classes and once a week, (3 hours) for evening classes. You will engage in some other activities separately with team members. All are mandatory. You will be responsible for preparing for class, attending and participating in all classes, reading the textbook and all online materials, doing all assignments, and posting assignments on Canvas. If you must miss a class, email me in advance. You will be responsible for finding out what you missed. In general the due dates for assignments, quizzes and such is Sunday Night at 11:59 PM. You should check Canvas to make sure this is true for each individual assignment.

Time Required – This course requires a significant amount of work to help you achieve these goals. On average, you need to set aside up to 9 hours a week for this course, including discussion, lecture, other classroom and online activities, reading, studying the materials, homework and team activities. (This is even more compressed during the summer sections.)

Readings & Online Materials –Readings and other online materials supplement the lecture slides and the textbook.

Canvas – Course materials and other information are on Canvas.

Assignments /Course Work

1. **Ethics Case Analysis, Assignment 1** - The only way to truly understand ethics is to apply the theories to real-world situations. Individuals will be responsible for reading and analyzing an ethical case scenario.
2. **Library Analysis/Fake News** – Advice from an NJIT Librarian. (NOT DURING Summer)
3. **Weekly Short Quiz** – We'll hold substantial discussion of the week's topics in class. To ensure you are prepared and have read the material, there is a quiz before the first class meeting of the week on the week's readings.
4. **Debate** – As part of a team you will persuasively argue about an ethical dilemma concerning technology in a debate format. This will be recorded using Kaltura and submitted to Canvas. See instruction in Canvas.
5. **Current Events Presentation** – This is an individual assignment that focuses on an interesting and timely topic showing the impact of technology on society. Each person will record and submit to Canvas. See Instructions in Canvas.
6. **Participation**. IS 350 is a discussion-based course, where students especially learn by participating in class discussions and other activities.

7. **Surveys**. Some sections will include extra-credit surveys.

8. **Community Service Internship** (*optional – **NOT During Summer***) – NJIT Career Services can provide you the opportunity to work with a Newark-area non-profit organization using your skills to help that organization achieve its goals. This is a great experience, great service, can open doors for you, and looks great on your resume!
9. There may be a possibility of gaining extra credit by participating in a research effort. The instructor will let you know if this is a possibility or not.

Required Textbook, Readings & Materials

Textbook (various options)

Quinn, Ethics for the Information Age, 8th edition, ISBN 9780135217979

See the Text book information link on Canvas

Readings & Materials

All required journal articles will be linked to the course in Canvas and/or be available through the NJIT digital library.

Note: From time to time I may assign additional readings and other materials.

Words of Wisdom

Do not get behind in reading the text and articles! You will regret it!

Suggestions, Questions, Problems and Falling Behind

If you have any problems or feel like you are falling behind, please contact me as soon as possible. It is your responsibility to recognize problems as early as possible, so we can work together to keep you progressing. Feel free to email me or make an appointment to visit during office hours if your comment is more private.

I welcome suggestions and questions. I encourage you to post these in the Canvas "Questions and Interesting Links" forum, so we can all share in the discussion.

Grading and other Requirements:

"A" breakers – You must do 3 things to be *eligible* for an A.

1. Post all assignments **on time**. Late assignments will lose 20% **per class**).

2. Participate in classroom and online discussions.

3. Attend all sessions or email me ahead of time if you will be late or cannot attend class.

1. Attendance will be taken
2. If you have four (4) unexcused absences you will lose one Letter Grade
3. If you have six (6) unexcused absences you will be given an "F" for the course

If you will miss any assignment deadline or session, email me in advance. Otherwise you will be disqualified from an A. (Emailing me does not necessary earn back the A, but is a required courtesy.)

The percentages for all course work are as follows. These are subject to adjustment. Note that the instructor may decide to grade on a curve.

Deliverables	Percentage	Grading Policy	
Assignment: Library Analysis/Fake News	5%	☐	A 90 and up
Assignment 1: Ethical Case Analysis	10%	☐	B+ 85 to 89
Assignment: Debate (group)	15%	☐	B 80 to 84
Assignment: Current Events Presentation	15%	☐	C+ 75 to 79
Weekly Discussions	10%	☐	C 70 to 74
Weekly Quizzes	5%		
Midterm Report	20%	☐	D 65 to 69
Final Report	20%		
TOTAL	*100%*	☐	F less than 65

	DELIVERABLES
Week 1	Watch Lecture Week 1 video Introduce yourself on the Canvas forum and reply to 2 classmates Read the posted material on how to avoid plagiarism and the NJIT policy Read Chapter 2 including interview at the end. Take quiz Chapter 2
Week 2	Lecture video for week 2 Check your current events topic and presentation date on Canvas Watch Video – 11 Steps to Doing an Ethical Analysis Watch video on How to do an Ethical Analysis Parts all 5 parts Read Applying Ethical Theories Summary Forum Week 2 – one post and 2 replies

Week 3	Watch Week 3 – IS -350 video (on Canvas) – Lecture week 3
	
	Introduction Watch video Lecture Week 3 - Unintended and Intended
	
	Consequences Listen to Stephen Johnson Interview
	
	Read Bio-Fuels Article
	
	    Discussion Forum – discuss the intended and unintended
	    consequences of Bio-Fuels and reply to 2 classmates
	
	Read Chapter 9 Take quiz
	
	Chapter 9
	
	Presentations (refer to Presentation schedule for your date)

Week 4	Watch video of Week 4 lecture – Professionalism and Codes of Ethics
	
	Assignment 1 (graded) due Sunday of this week. Instructions on Canvas.
	
	Read Ten Commandments of Computer Ethics
	
	Post to the Forum your comments about the Codes of Ethics. Reply to 2 classmates
	
	    Listen to the Turkle video and prepare your report for submission at the
	    end of Week 5
	
	Read Chapter 10.5
	
	Read Chapter 3 including interview at the end.
	
	Take quiz Chapter 3
	
	Presentations (refer to Presentation schedule for your date)

Week 5	watch Lecture Week 5 video
	
	Read articles and listen to podcasts listed this week (optional material not required)
	
	    Submit your Sherry Turkle assignment to the Turkle Forum (not
	    the weekly discussion forum)
	
	    Submit your comments and replies on "Death of the Phone Call" to the
	    week's Discussion Forum (not the Turkle Forum) and reply to two
	    classmates
	
	Read Chapter 5
	
	Take quiz for Chapter 5
	
	Presentations (refer to Presentation schedule for your date)

Week 6	Watch Lecture Week 6
	Readings, videos, and podcasts listed in Canvas for the week
	Read Chapter 6 for next week – including interview at the end
	Take Chapter 6 quiz
	Post to this week's Forum (1 substantive original post & 2 substantive replies) regarding the assigned readings, videos or podcasts this week
	Presentations (refer to Presentation schedule for your date).
Week 7	Watch Lecture Week 7
	Midterm Practice – Note: instructions not the same as for the Midterm Report.
	Watch George Takei and Japanese Internment
	Watch FBI Abuses
	Watch 8-year-old on TSA watch list
	Perform ethical analysis on Airline Scenario in Ethical Analysis Practice module (do not submit) – a solution will be posted when the week is finished
	Start working on your group Debate slides
	Post to the Discussion Forum (and reply to 2 classmates) regarding: the George Takei video, FBI abuses and the case of the 8-year old boy banned by TSA
	Read all of Chapter 10 (quiz will be during Week 9)
	Presentations (refer to Presentation schedule for your date)
Week 8	Lecture video Week 8
	Take-home midterm Report due (no class on campus this week)
N/A	Spring Break – no class this week
Week 9	Watch video for Week 9 Lecture Debate
	Debate link to Kaltura video and slides to be posted by due date. See Debate instructions. Late submissions will not be accepted
	Take quiz for Chapter 10

Week 10	Watch Lecture week 10
	Read and listen to content listed on this week's Canvas module
	Post to this week's Forum (1 substantive original post and 2 substantive replies). Read Chapter 7 including interview at the end and take quiz 7
	Take quiz for Chapter 7

Week 11	Watch Lecture Week 11
	Listen to: Economist Babbage: Internet of Things Security
	Read article: "The Internet of Things Could Kill People"
	Listen to: "The FBI Can Turn on Your Webcam"
	Read: "Why the Next Denial-of-Service Could Be Against Your Car"
	Listen to The Creepy Line trailer
	Listen to The Creepy Line – John Stossel
	Post to this week's Forum (1 substantive original post and 2 substantive replies) regarding one of the assigned readings, videos or podcasts this week
	Read Chapter 1 including interview at the end
	Take quiz chapter 1
Week 12	Watch video Lecture Week 12
	Read, watch, and listen to the items listed on Canvas for this week.
	Post to this week's Forum (1 substantive original post and 2 substantive replies) regarding one of the assigned readings, videos or podcasts this week
	CDC Scenario as instructed in this week's Canvas module (practice only) – do not submit; a solution will be posted after the week concludes
	Read Chapter 8 including the interview at the end
	Take quiz Chapter 8

Week 13	Watch video lecture for week 13

Watch videos and read items listed in this week's Canvas module

Review Fake News Presentation + complete quiz

Post to the Discussion Forum about this week's assigned material:

· Result of the execution of the programming example with the January input

· Will the user find the results useful in all cases?

· What is the programmer's responsibility before releasing the code? what is the responsibility after releasing the code?
· Discuss the three necessary things needed stated in the "Tell Me More" podcast – time, money, and talent
· Discuss the system testing issues with the ObamaCare website and how it contributed to problems.
Read Chapter 4 including the interview at the end of the

chapter Take Chapter 4 quiz |
| Week 14 | Watch Week 14 Lecture

Listen to the podcasts, watch the videos and read the articles assigned for this

week. Post to the Week 14 Discussion.
Final Report due.

Note that the information for the Final Report is in the Final Report section of our Canvas class.

Follow instructions completely to receive credit.
There are two parts to this assignment- Make certain you do both!

The Final Report will **not be** accepted late. |
| Week 15 | Take-home final exam due |