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Fall 2019

IS 350-105: Computers, Society and Ethics

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IS 350 - Computer, Society & Ethics Thursday 6 to 9PM, CKB206

Course Format

We meet for discussion, lectures and other activities usually 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 Moodle. If you must miss a class, email me in advance. You will be responsible for finding out what you missed.

Instructor

Todd C. Will

Office: GITC 3500 E-mail: todd.will@njit.edu

(include "IS350" in the email subject)

Office Hours:

• Thursdays, 5 to 6PM, GITC3500

• Wednesday, 6 to 9PM, via Skype (my username is toddapod)

General Course Information

1. 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.

2. Course Goals:

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

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

3. **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.)

- 4. **Readings & Online Materials** –Readings and other online materials supplement the lecture slides and the textbook.
- 5. **Moodle** Course materials and other information are on Moodle (moodle.njit.edu).
- 6. Assignments / Course Work
 - a. **Library Analysis** How to use the library and to find good sources.
 - b. **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.
 - c. **Debate** As part of a team you will persuasively argue about an ethical dilemma concerning technology in a debate format.
 - d. **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 present the topic in class during the term.
 - e. **Interactive Writing Assignment**. Some sections will have two short online writing assignments.
 - f. **Participation**. IS 350 is a discussion-based course, where students especially learn by participating in class discussions and other activities.
 - g. **Surveys**. Some sections will include extra-credit surveys.
- 7. **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!

Required Textbook, Readings & Materials

Textbook (various options)

Michael J. Quinn, Ethics for the Information Age, 7th edition (2017).

- printed, rental and online versions are available through the NJIT bookstore

Alternative online version through VitalSource (\$48);

- (see link on Moodle)

(If you have a hard copy of the sixth edition, it may be "mostly good enough", but your exams will mostly come from the 7th edition and it has some new material.)

Readings & Materials

All required journal articles will be linked to in the course Moodle and/ or 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 Moodle "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 day** (**not 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.
 - a. Attendance will be taken
 - b. If you have three (3) unexcused absences you will lose one Letter Grade
 - c. 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 |
|--|------------|
| Assignment: Getting Started | 2% |
| Assignment: Library Analysis | 10% |
| Assignment: Debate (group) | 13% |
| Assignment: Current Events Presentation | 14% |
| Weekly Quizzes | 15% |
| Participation / Interactive Writing Assignment | 10% |
| Midterm Report | 18% |
| Final Report | 18% |
| TOTAL | 100% |

Grading Policy

| • | A 90 and up | • | C+ 75 to 79 |
|---|-------------|---|----------------|
| • | B+ 85 to 89 | • | C 70 to 74 |
| • | B 80 to 84 | • | D 65 to 69 |
| | | • | F less than 65 |

Alternative Grading Policy based on a Curve

- A (30%)
- B, B+ (30-40%)
- C, C+ (30%)
- D, F (as necessary)

What if I Don't Agree with my Grade?

If you do not agree with your grade, you have <u>1 week</u> to dispute it after it is posted. Follow the instructions on Moodle.

But What If Moodle Crashes and I Cannot Submit Homework or Complete my Midterm or Final?

What if...? It's simply too bad. Would your boss accept such an excuse? Do NOT wait till the last minute to do your homework or take your exam. There are many computers on campus available for your use, hence, no excuse.

Academic Honesty, Integrity and Cheating

NJIT and Rutgers students are expected to follow published guidelines on academic honesty and integrity. You must acquaint yourself with these policies before submitting any assignments.

njit.edu/academics/integrity.php

Violations will be reported to the Dean of Students at both institutions and may result in failure in the course and probation, or failure in the course and expulsion. I pursue Honor Code violations immediately and aggressively.





IS 350 Computer, Society & Ethics Weekly Schedule

Weekly Activities

- o Read the textbook and read/view any other materials before the week's first class.
- o Take the weekly quiz by midnight on the day before the week's first class.
- o Attend every class session.
- All major assignments are due at midnight on the Sunday before the week's first class.

Schedule: Part 1—History, Theory, and Ethics + NJIT Library Experience

Acquiring the intellectual tools for analyzing the issues in Part 2 of the course.

| Date | Modules and Topics | Additional Assignments |
|------------|--|---|
| Week 1 9/1 | Introduction Readings + Materials: O Quinn, Appendix A (textbook) O Any others posted on Moodle | Getting Started Activities assigned (due 9/8) Library Research Analysis assigned (Not for Summer) (V1 due 9/15 – V2 due 10/6) (prepare for assignment confirmation) Prepare for Syllabus Confirmation |
| Week 2 | M1. History of Computing | Getting Started Activities due 9/9 |
| 9/8 | Lecture Slides: Slides + Supplements Readings + Materials: Quinn, Chapter 1 (textbook) Any others posted on Moodle | Current Events assigned (topic approval due 9/15) (slides due 11/10) (prepare for assignment confirmation) |
| | Activities: o Community Service Presentation | Community Service Extra Credit (due 12/15) |

| Date | Modules and Topics | Assignments |
|----------------|---|---|
| Week 3 | M2. Ethical Analysis | Current Events Topic Approval due 9/15 |
| 9/15 | Lecture Slides:Slides + SupplementsDoing an Ethical Analysis | Library Research Analysis VI due 9/15 |
| | Readings + Materials: O Quinn, Chapter 2 (textbook) O Any others posted on Moodle | Read CONFIRM article (posted in Module 3's materials) and be prepared to discuss in class |
| Week 4 9/22 | M3. Professionalism and Codes of Conduct Lecture Slides: Slides + Supplements Readings + Materials: Quinn, Chapter 9 ACM Code of Ethics Software Engineering Code of Ethics | ACM Code of Ethics You should learn the "moral imperatives" in bold 'by heart' and understand what each of them means so that you can apply each. |
| | Any others posted on Moodle Activities: Library Assignment Feedback Ethical Analysis Exercises | |

Part 2—Social Issues Caused by the Rise of Computing Technology

Discussing many topics and issues related to the introduction of computing into society. In each module we take up a different issue. Try to apply the ethical theories that we have studied to each issue. Who are the stakeholders and what is at stake? What are the intended and unintended consequences, as well as? Can you infer the secondary and tertiary effects?

| Date | Modules and Topics | Assignments |
|--------|---|-------------------------------------|
| Week 5 | M4. Equity, Gender, Access & the Digital Divide | Current Events slides |
| 9/29 | <u>Lecture Slides</u> : | due 11/10 |
| | ○ Slides + Supplements | |
| | Readings + Materials: | Midterm Report assigned (due 10/20) |
| | o Quinn, Section 10.5 | |
| | o Any others posted on Moodle | |

| Date | Modules and Topics | Assignments |
|---------|---|------------------------------------|
| Week 6 | M5. Examining the Net | Library Research Analysis |
| 10/6 | <u>Lecture Slides</u> : | V2 due 10/6 |
| | ○ Slides + Supplements | |
| | Readings + Materials: | Debate assigned (slides due 10/27) |
| | o Quinn, Chapter 3 | (prepare for debate |
| | o Any others posted on Moodle | confirmation) |
| Week 7 | M7. Privacy and Civil Liberties | |
| 10/13 | <u>Lecture Slides</u> : | |
| | ○ Slides + Supplements | |
| | Readings + Materials: | |
| | o Quinn, Chapter 5 | |
| | o Any others posted on Moodle | |
| Week 8 | M8. Computers + Government + Military | Midterm Report due 10/20 |
| 10/20 | <u>Lecture Slides</u> : | |
| | ○ Slides + Supplements | |
| | Readings + Materials: | |
| | o Quinn, Chapter 6 | |
| | o Any others posted on Moodle | |
| Week 9 | Debate in Class | Debate Slides due 10/27 |
| 10/27 | Each group debates using your PowerPoint presentation. | |
| | (Details and submission instructions are in the top Section of Moodle.) | |
| | Activities: | |
| W 1 10 | Debates I.G. G. C. | |
| Week 10 | M10. Work, Robotics and Green Computing | |
| 11/3 | Lecture Slides: | |
| | o Slides + Supplements | |
| | Readings + Materials: | |
| | o Quinn, Chapter 10 | |
| | Any others posted on Moodle | |

| Date | Modules and Topics | Assignments |
|------------|---|---|
| Week 11 | Supplemental Activities | Current Events slides |
| 11/10 | Activities: | due 11/10 |
| | Final report exercise Other activities | Final Project assigned (due 12/15) |
| Week 12 | M11. Computer Crime & Security | |
| 11/17 | Lecture Slides: | |
| | ○ Slides + Supplements | |
| | Readings + Materials: | |
| | o Quinn, Chapter 7 | |
| | o Any others posted on Moodle | |
| Week 13 | M12. Professional and Legal Responsibilities, Accountability, Liability, and Risk Management | |
| (meet | <u>Lecture Slides</u> : | |
| Tuesday | ○ Slides + Supplements | |
| this week) | Readings + Materials: | |
| | o Quinn, Chapter 8 | |
| | o Any others posted on Moodle | |
| Week 14 | M13. Digital Intellectual Property | Final Project due 12/15 |
| 12/1 | <u>Lecture Slides</u> : | |
| | ○ Slides + Supplements | Community Service Extra Credit due 12/15 |
| | Readings + Materials: | |
| | Quinn, Chapter 4 Any others posted on Moodle | Extra Credit Survey due 12/15 |
| 12/16 | Grades due in Registrar | |