CSE/ISE 312 - Legal, Social, and Ethical Issues in Information Systems

Course Information

Spring 2017

Stony Brook University

Instructor: Dr. Paul Fodor

http://www.cs.stonybrook.edu/~cse312

Course Description

- "This course deals with the impact of computers on us as individuals and on our society. Rapid changes in computing technology and in our use of that technology have changed the way we work, play, and interact with other people. These changes have created a flood of new social and legal issues that demand critical examination. For example, technologies such as Gmail, Facebook, MySpace, along with music sharing sites and wikis create new social, ethical, and legal issues. This course is offered as both CSE 312 and ISE 312."
- https://www.cs.stonybrook.edu/students/Undergraduate-Studies/courses/CSE312

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Course Description

- In short:
  - Issues that arise from computing technology, the Internet, and other aspects of cyberspace.
    - To understand the implications and impacts of the technology.
  - Historical background to put some of today's issues in context and perspective.
  - Ethical issues for computer professionals
    - not different from ethical principles in other professions or other aspects of life: honesty, responsibility, and fairness.
    - but special kinds of problems arise in our profession, so we will discuss professional ethical guidelines and case scenarios specific to computing professions.

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Course Description

- Here are a few examples of the issues we will be talking about:
  - There is a great deal of information about all of us recorded in computer databases.
    - What rules should govern how this information is used?
  - We all get privacy notices in fine print from our banks, credit card companies, etc.
    - What do they really mean?

There are (at least) two sides to almost all of the questions we will consider in this course. We will spend much of our class time discussing the issues and exploring different points of view.

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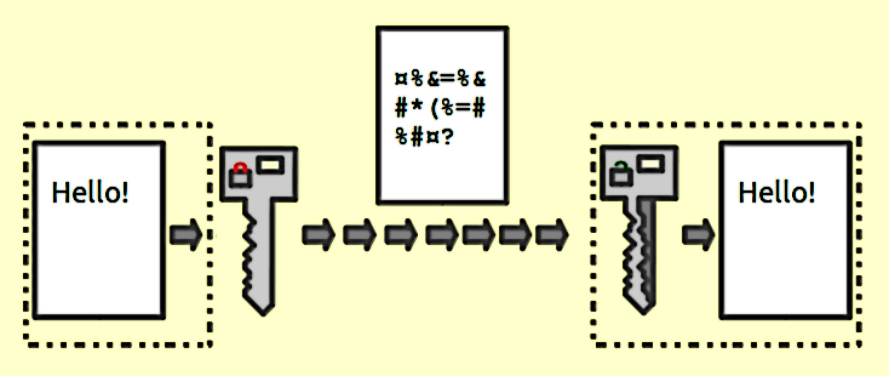
Course Description

- Hacking, identity theft and credit card fraud has increased in recent years.
  - What are responses to these types of fraud and what precautions can we take to prevent this from happening?
- New encryption methods make it possible to keep e-mail and phone conversations secret from others.
  - How should our desire for privacy be balanced with the need of law-enforcement agencies to intercept communications of suspected criminals or terrorists?



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Course Description

- More examples:
  - How serious are the problems created by Web sites that contain pornography, "hate" material directed at various groups, bomb-making information, etc?
    - Should there be any restrictions on material that is put on the Web?
  - Computers are increasingly used to control medical devices, airplanes and other safety-critical systems.
    - How safe are such systems?
    - How safe is “safe enough”?
    - What can we do to manage the risks involved?

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Course Description

- More examples:
  - It is easy to use computers to copy music, software, books, etc., in violation of copyright law.
    - What is the extent of this problem?
    - How do ethical principles impact behavior in terms of access to material under copyright protection?
    - What can or should be done about it?
    - What is free software?
    - Should all software be free?

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Course Prerequisites

- U3 or U4 standing, one D.E.C. E or SNW course.

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Official Course Outcomes

- The following are the official course goals agreed upon by the faculty for this course:
  - An understanding of how computing and information systems give rise to social issues and ethical dilemmas.
  - An ability to discuss the benefits offered by computing technology in many different areas and the risks and problems associated with these technologies.
  - An understanding of some social, legal, philosophical, political, constitutional, and economical issues related to computers and the historical background of these issues.
  - To recognize the need for continuing professional development.

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Topics

- **Major Topics Covered in Course:**
  - Privacy
  - Freedom of speech
  - Intellectual property
  - Crime
  - Impact on work environment
  - Evaluating and controlling technology
  - Errors, failures, and risk
  - Professional ethics and responsibilities

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Instructor Information

- Dr. Paul Fodor
  214 New Computer Science Building
- Office hours: Mondays and Wednesdays 5:30PM-7:00PM.
- Email: paul (dot) fodor (at) stonybrook (dot) edu
  - Please include "CSE 312" in the email subject and your name in your email correspondence

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General Information

- Meeting Information:
  - Lectures: TuTh 4:00PM - 5:20PM, Javits 111.
- Course Web page: http://www.cs.stonybrook.edu/~cse312
- Blackboard will be used for assignments, grades and course material

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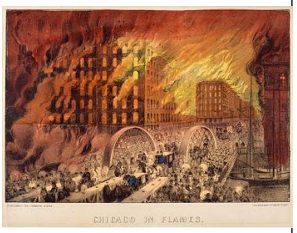
Textbook

- A Gift of Fire, 4th Edition, Sara Baase, Pearson Prentice Hall, 2012. ISBN# 0-13-978-0-13-249267-6.
  - Why is it called the "gift of fire"?
    - Prometheus, according to Greek myth, gave the gift of fire to humans
      - According to anthropologists, this is what started our race: we used fire to: heat our homes, cook our food, and run the machines that we depend on.
      - But there were also disasters because of fire: the fires of Rome, the Chicago fire in 1871 left 100,000 people homeless, the fires of the oil fields of Kuwait were intentionally set ablaze, etc.
        - Fire was considered as the root of some of the most dangerous humanly created disasters for thousands of years.
    - Computer technology is the most significant new technology since the beginning of the Industrial Revolution:
      - it allowed us to control machines, communicate, travel to space, etc.
      - but it also creates powerful problems: potential loss of privacy, multimillion-dollar thefts, and breakdowns of large, complex systems that we depend on (e.g., air traffic control systems, communications networks, banking systems)



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Grading Schema

- Grades will be based on homework and exams according to the following formula:
  - Midterm exam -- 25%
  - Final exam -- 25%
  - Class quizzes and homework assignments -- 25%
  - Class discussions -- 25%

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Exam dates

- Midterm exam: Thursday 3/23, classtime, in classroom.
- Final exam: Monday 5/15, 2:15AM-4:15PM, in classroom.
  - See Final Exams University Schedule here: http://www.stonybrook.edu/commcms/registrar/registration/exams.html

Grading Schema

- The Pass/No Credit (P/NC) option is not available for this course.
  - This policy applies to all CSE/ISE undergraduate courses used to satisfy the graduation requirements for the major.

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Assignments

- Most assignments will involve preparation for a class discussion.
  - Typically, this preparation will involve reading material beyond the text book as it relates to a single assigned topic.
  - This preparation typically will involve reading references cited in the text, usually about 20-30 pages.

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Regrading of Homework/Exams

- Please meet with a TA or the instructor and arrange for regrading.
- **You have one week from the day grades are posted or mailed or announced**
  - Late requests will not be entertained

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Tentative Class Schedule

Week	Lecture Topics
1	Introduction and Background
2	Privacy
3	Freedom of Speech
4	Intellectual Property
5	Intellectual Property (cont.)
6	Computer Crime
7	Impacts on Employment
8	Spring Recess
9	Review Session and Midterm Exam
10	Impacts on Employment (cont.)
11	Evaluating Information
12	Failures and Errors in Computer Systems
13	Professional Ethics & Responsibilities
14	Professional Ethics & Responsibilities (cont.)
15	Final Review Session

Disability Support Services

- If you have a physical, psychological, medical or learning disability, contact the DSS office at Room 128 ECC. Phone 632-6748/TDD
- If you are planning to take an exam at DSS office, you need to tell me ahead of time for every exam.
- **All documentation of disability is confidential.**

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Academic Integrity

- You can discuss general assignment concepts with other students: explaining how to use systems or tools and helping others with high-level design issues
- You **MAY NOT share** assignments, source code or other answers by copying, retyping, looking at, or supplying a file
  - Assignments are subject to manual and automated similarity checking (We do check! and our tools for doing this are much better than cheaters think)
- If you cheat, you will be brought up on academic dishonesty charges - we follow the university policy:
  - http://www.stonybrook.edu/uaa/academicjudiciary

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Catastrophic events

- Major illness, death in family
- Formulate a plan (with your CEAS academic advisor) to get back on track
- Advice
  - Once you start running late, it's really hard to catch up

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Please

- Please be on time
- Please show respect for your classmates
- Please turn off (or use vibrate for) your cellphones

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- On-topic questions are welcome

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Welcome and Enjoy!

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