CSC 1200: Ethics in Computing

Credit Hours: 1 hour

Frequency: Fall and Spring semesters

Prerequisites: Credit or enrollment in CSC 1253 or 1350; credit or enrollment in ENGL 1001, 1005, or HNRS 2000

Catalog Course Description:

An introduction to ethics theory, ethical decision-making as it relates to the computing professional, licensing, intellectual property, conflicts of interest, freedom of information and privacy, security.

Course Outcome

1. Be familiar with the legal requirements, ethical issues, and professional issues in the computing profession.
2. Be familiar with types of ethical issues arising in the computing profession.
3. Be familiar with the social impact of decisions and actions of participants in the computing profession.
4. Be familiar with writing short essays and papers related to legal, ethical and professional issues in computing.
5. Be familiar with making peer-oriented oral presentations and classroom debates.

Texts and Other Course Materials

- Sara Baase, <u>A Gift of Fire: Social, Legal, and Ethical Issues for Computing and the Internet, 3/E</u>, Pearson/Prentice Hall, 2008

Major Topics

- Introduction to theory of ethics and codes of conduct and practice.
- Moral problems and applying ethical reasoning skills.
- The social impact of computers in the world.
- Ethical responsibilities of the computing professional in upholding the ethical standards of the profession and civic responsibility.
- Legal issues that pertain to licensing, privacy, and copyright laws. Study of the Data Protection Act and the Freedom of Information Act and their implications.
- Legal issues related to contracts, safety-critical systems and legal liability.
- Freedom of information, freedom of speech, censorship, filtering, privacy, and security.

- Ethical issues arising from software errors and with databases.
- Ethical issues related to the internet, viruses and spyware.
- Issues raised by outsourcing.

Assignments/Projects/Laboratory Projects/Homework

- Written assignments in expository format to be completed so that the student is prepared for class discussion.
- Brief oral presentations on current and relevant new articles related to ethical topics in computing.
- Paper(s)

Oral Communication (Presentations)

- One major oral presentation of 5-10 minutes. Students choose a topic for their group (3-5 students) and each student gives a 5-10 minute PowerPoint presentation on his/her subtopic. Students will be judged and graded on preparation and presentation skills as well as on content. (12.5% of the grade)
- In addition each student is graded each class session on participation in the class discussion. (25% of the grade)

Written Communication

- Major paper: At least three pages, normally a summary of the research the student did in preparing for the major presentation. Each paper must contain at least three references. (12.5% of the grade)
- Each student prepares a short paper on the class reading for the week. Either a summary of the day's reading or the student's view of an issue. For example, "What would constitute your ideal copyright law". (12.5% of the grade)
- 1 midterm, 1 final exam. Both are essay exams, the student chooses three of four possible essay questions. (together 25% of the grade)
- For all written work, students will be judged and graded on effective writing style and grammatical correctness as well as on content.

Curriculum Category Content (estimated in semester hours)

Area	Core	Advanced	Area	Core	Advanced
Algorithms	0		Data Structures	0	
Software Design	2		Prog. Languages	0	
Computer Arch.	0				

Relationship to Criterion 3 Outcomes

A	B	C	D	E	F	G	H	I	J	K
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Math Fundamentals:

Data Structures:

Algorithms and Software:
      Analysis and Design: structure and access of the Internet specifically access to links and
      targets and use of key works (2 hrs)
Computer Organization and Architecture:

Concepts of Programming Languages:

Social and Ethical Issues:
      95% of the course (~43hrs)
Oral Communication (presentations):
      class discussion and individual participation 30% (~13.5 hrs)

Written Communication:
      (see section on written communication)
      1 midterms, 1 final and homeworks which require formulating thoughts in written form

Course Coordinator: Dr. Evangelos Triantaphyllou
Last Modified: October 6, 2011