

I400 Professionalization in Informatics

Spring 2006

Instructor: Prof. Eden Medina
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Lectures: MW 1:00-2:15
Office Hours: M 2:15-3:15 Location TBD, or by appointment

Assistant Instructor(s):
Breanne Kunz bkunz@indiana.edu

Textbook:
Deborah Johnson, *Computer Ethics*, Third Edition, Prentice Hall, 2001.

Batya Friedman, *Human Values and the Design of Computer Technology*, Center for the Study of Language and Information, 2001, paperback edition.

Other readings will be distributed in class or made available via oncourse.

Course Description

This class will explore some of the ethical and professionalization issues that arise in the context of designing and using networked information technologies. Using a combination of lecture, discussion, presentations, writing, and other methods, this course will examine frameworks for making ethical decisions, the process of and need for professionalization in informatics, and selected case studies in information ethics.

Objectives

By the end of this course, students will:

- 1) Define the major ethical theories and frameworks that have shaped the field of computer ethics and use them to address issues relevant to the informatics profession.
- 2) Identify some aspects of their own ethical code and defend them in writing and in speech
- 3) Recognize the interplay of human values and technological design and articulate how "ethical" considerations might shape the design of technological systems.
- 4) Be able to describe and demonstrate the defining attributes of a informatics/computer professional and the ethical practices employed by such professionals in industry and academia.

Student Conduct, Rights and Responsibilities

Please refer to <http://dsa.indiana.edu/Code/index.html>

All students are expected to submit their own original work.

Grading:

Class discussion: 20%

Weekly thought papers: 20%

Small papers (2): 30%

Final paper or project: 30%

The percentages listed above will be used as a general guideline for determining final grades. Demonstrated improvement during the semester will also be taken into consideration.

In addition to participation in class discussions, students will participate in in-class group and other activities and occasionally produce small assignments in class. These assignments will be included in the class discussion grade.

All work for I400/I590 must be submitted before or on the specified deadline. Late work will be penalized. A detailed late policy will be distributed in class.

Students are encouraged to read online and print magazines and newspapers and share articles related to science and technology ethics in class.

Response papers:

Students will write weekly one-page response papers on the reading or the class. These will be graded and used to measure whether students have completed the assigned reading and indicate the student's mastery of course themes. Students will submit a response paper *every Monday* that addresses the reading for the week (unless otherwise noted).

Small papers:

Two short papers will be assigned during the semester. These papers will be 4-6 pages, double spaced, standard margins and font.

Final project/paper:

The final project/paper will be discussed more extensively during the last third of the course. Although you will work in a group for the project, each individual will be asked to turn in a separate paper. Graduate students will be doing a term paper instead of a group project.

Extra credit:

Students will have the opportunity to earn extra credit points throughout the semester. Details will be given in class.

Topics**Week #1**

1/9 – Introduction, logistics, and the ethical process

1/11 – Differentiating ethics, laws, and morals, in-class activity

Reading: Chapter 1 – Johnson for class 1/18

Homework: Response paper due 1/18

Week #2

1/16 – OFF (MLK Day)

1/18: Why computer ethics?

Homework: Response paper due 1/23

Reading: Chapter 2 – Johnson for class 1/23

Week #3

1/23: Ethical Frameworks: utilitarianism, deontological theories, and the categorical imperative

1/25: Ethical Frameworks: rights-based ethics, the social contract, and virtue ethics

Homework: **First short paper assignment due 2/8**; Response paper due 1/30.

Reading: Chapter 4 – Johnson pp. 81-97, 103-108 for class 1/30.

Week #4

1/30: Ethics Online

2/1: In class activity - online behavior

Reading: Chapter 4 Johnson – 97-103, Mark Marion and Abby Goodrum “Terrorism or Civil Disobedience: Toward a Hactivist Ethic” (oncourse) for class 2/6.

Homework: Short paper due 2/8.

Week #5

2/6: Class cancelled

2/8: Hacker ethics and cybercrime

Reading: Chapter 6 – Johnson; James Boyle, “A Politics of Intellectual Property: Environmentalism for the Net?” (oncourse); Shelly Warwick, “Is Copyright Ethical? An Examination of the Theories, Laws, and Practices Regarding the Private Ownership of Intellectual Work in the United States” (oncourse) for class 2/13.

Homework: Response paper due 2/13

Week #6

2/13: Philosophy of Property

2/15: Individual ethics: File sharing and software piracy

Reading: Chapter 7 – Johnson, Chapter 2—Friedman for class 2/20.

Homework: Response Paper due 2/20

Week #7

2/20: Accountability

2/22: In-class activity: accountability

Reading: http://www.igda.org/articles/rreynolds_ethics.php for class 3/1.

Homework: Response paper due 2/27

Week #8

2/27: Class cancelled

3/1: Liability, risk, and the computer game industry

Reading: Chapter 5 – Johnson for class 3/6

Homework: **Second short paper assignment due 3/22**; Response paper due 3/6.

Week #9

3/6: Surveillance and panopticism

3/8: Guest lecture: Recordkeeping (Prof. Kalpana Shankar)

Reading: Friedman Introduction, Chapter 1 for class 3/20.

Homework: Response paper due 3/20

3/13-3/17: Spring Break**Week #10**

3/20: Human values in design

3/22: In class activity: value sensitive design

Reading: Chapter 3, Chapter 16 – Friedman for class 3/27.

Homework: Response paper

Week #11

3/27: Digital divide, accessibility, and social justice

3/29: In class activity: access

Reading: Friedman chapter 8 for class 4/3

Homework: **Assign final project.** Response paper due 4/3

Week #12

4/3: What makes us human? The ethics of computers as people

4/5: Movie TBD

Reading: Chapter 3 – Johnson; Codes of ethics distributed in class. Reading for class 4/10.

Homework: Response paper

Week #13

4/10: Codes of ethics and professionalization

4/13: In class activity: the ethics of informatics

Reading: IU Webpage on human subjects
<http://research.iu.edu/rschcomp/hmpg.html>

Homework: Prepare final project

Week #14

4/17: Research ethics – human subjects.

4/19: Research ethics – funding

Week #15

4/24: Presentations of group assignments

4/26: Presentations of group assignments

5/1: **All written final projects due Eigenmann 1035 by 5pm**