**Brooklyn College**
**Department of Computer and Information Science**

**CISC 2820 [12W] Computers and Ethics**
3 hours lecture; 3 credits

Analysis of ethical issues pertaining to computers and the workplace, anonymity and privacy, copyright and patent law (as applied to software), computer crime, security, unauthorized use, codes of conduct for computer professionals, access and availability of computing technologies. Application of theoretical frameworks such as virtue ethics, deontological theories and utilitarianism to the ethical problems encountered in computing technologies. Writing intensive course. (This course is the same as Philosophy 3318 [14.4W].)

**Objectives**

- Students will gain awareness that, in their role as professionals designing, using and maintaining computing technologies, they have a special responsibility to understand the ethical issues that that technology raises:
  - Technology as an agent of social and political change
  - Computers and the workplace
  - Unauthorized use and misuse of computers
  - Privacy and anonymity of computer users
  - Copyright and patent law as applied to software
  - Codes of professional conduct for computer professionals
  - Access and availability of computing technologies

- Students will gain an appreciation for traditional ethical theories such as virtue ethics, utilitarianism, or deontological theories to debates in computing technology.

- Students will be enabled to make a systematic assessment of various claims made in favor of (or against) positions taken in computing.

- Students will gain proficiency in effective technical writing:
  - use writing to reflect on one's learning and to understand difficult material.
  - draft and revise written material
  - organize according to a pattern appropriate to the discipline
  - ability to edit one's work so that grammar and syntax are correct
  - ability to demonstrate philosophical and ethical arguments in writing

**Textbook:**
Richard A. Spinello, *Cyberethics: Morality and Law in Cyberspace*, Jones and Bartlett Publishers, Massachusetts, 2005. ISBN: 0-7637-0064-9

Richard A. Spinello and Herman T. Tavani, *Readings in Cyberethics* (2nd ed.), Jones and Bartlett Publishers, Massachusetts, 2005. ISBN: 0-7637-2410-6

**Syllabus**

**Week 1 and 2:** Introduction to Ethical frameworks: virtue ethics, utilitarianism, deontological theories.

**Week 3 and 4:** The need for ethical assessment and analysis of technologies and their use. Computing as a technology in need of an ethical framework (illustration via case studies). Introduction to current policy vacuums in computing.

**Week 5 and 6:** Computers in the Workplace. Deskilling workers. Threats to employment. Issues of responsibility in delegating work to computers. Over-reliance on computers. A 5-page paper will be assigned on the ethics of technological displacement of workers, or on the need for ethical standards in computing. This paper will be critiqued and will be revised by the student.

**Week 7 and 8:** Unauthorized use and misuse of computers, viruses, computer crime, appropriate use of computers.

**Week 9 and 10**: Privacy, Anonymity, Encryption (with reference to computer networks): violations of privacy, the use and abuses of anonymity, encryption as a privacy enabler.

**Week 11 and 12:** Copyrights and Patents: The appropriateness of applying patent models to software. The ethics of software copyright licensing schemes. Can software be patented? What kind of copyright should be applied to software? A 5-page paper will be assigned requiring the analysis of any ethical issue in computing.

**Week 13:** Professional Responsibility: Codes of conduct for computer professionals: the need for them, possible codes of conduct, comparisons with codes of conduct for professionals in other sciences (medicine, physics).

**Week 14:** Accessibility: the digital divide and what to do about it; should the right to computing be guaranteed by the government?

## Bibliography

Sarah Baase, *A Gift of Fire*, Prentice-Hall, New York, 2004

Deborah Johnson, *Computer Ethics*, Prentice-Hall, New York, 2001

Peter Singer ed., *A Companion to Ethics*, Blackwell Publishing, Cambridge, 1993

Richard A. Spinello, *Ethical Aspects of Information Technology.* Prentice Hall, New York, 1995

Deborah G. Johnson and Helen Nissenbaum, *Computers, Ethics & Social Values.* Prentice Hall, New York, 1995

Ian Barbour, *Ethics in an Age of Technology: The Gifford Lectures*, Harper, San Francisco, 1992

Duncan Langford, *Practical Computer Ethics*, McGraw-Hill, London, 1995

Richard Stallman, *Free Software, Free Society Selected Essays of Richard M. Stallman*, Free Software Foundation, 2002

Robert Cavalier ed., *The Impact of the Internet on Our Moral Lives*, SUNY Press, 2003.

Terrell Ward Bynum and Simon Rogerson, Eds., *Computer Ethics and Professional Responsibility*, Blackwell, 2004.

Terrell Ward Bynum. *Information Ethics: An Introduction*. Cambridge, MA: Blackwell Publishers, 1998.

Terrell Ward Bynum and James H. Moor, eds. *The Digital Phoenix: How Computers are Changing Philosophy*. Cambridge, MA: Blackwell Publishers, 1998.