

**TCSS 325 Master Syllabus**  
**Version: April 2011**  
**(Approved: 27 May 2011)**

**Catalog Description**

Current catalog description:

Covers social issues involving functioning as effective computer professional, diverse professional/technical literature, representation of controversies, understanding ethical frameworks/value systems underlying views, determining professional impacts on co-workers, employers, clients, systems users, and society. Emphasizes written, verbal, electronic communications skills necessary in diverse workplace. Prerequisite: a minimum grade of 2.0 in either TCSS 143, CSE 143, T INST 311, or T INST 312; 10 credits of writing coursework.

Proposed catalog description:

Analysis of social, political and ethical implications of computer and information technologies. Covers Western ethical theories, professional ethics, and diverse topics in Computer Ethics. Emphasizes writing and the construction of ethical arguments. Prerequisite: a minimum grade of 2.0 in either TCSS 143, ITS 300; 10 credits of writing coursework.

**Student Learning Goals** (to be added to syllabus handed out to students)

- Write coherent summaries of literature related to course topic.
- Identify principles of Western ethics that are embedded in or related to particular technological designs or technology policies.
- Construct an ethical argument in support of a thesis.
- Employ research literature to evidence descriptive and normative claims.
- Describe some of the social, political, and economic consequences of technology use within particular contexts or cultures.

**CSS Degree Student Learning Outcomes that this course contributes to** (to be added to syllabus handed out to students)

- e. an understanding of professional, ethical and social responsibilities;
- f. an ability to communicate effectively with a range of audiences;
- g. an ability to analyze the impact of computing on individuals, organizations and society, including ethical, legal, security and global policy issues;
- h. recognition of the need for, and an ability to engage in, continuing professional development;

**UWT Student Learning Goals that this course contributes to** (to be added to syllabus handed out to students)

- *Inquiry and Critical Thinking*: Students will acquire skills and familiarity with modes of inquiry and examination from diverse disciplinary perspectives, enabling them to access, interpret, analyze, quantitatively reason, and synthesize information critically.
- *Civic Engagement*: Students will define their roles and responsibilities as members of a broader community and develop an understanding of how they can contribute to that community for the greater good.
- *Communication/Self-Expression*: Students will gain experience with oral, written, symbolic and artistic forms of communication and the ability to communicate with diverse audiences.

### **Topics covered**

### **Required Topics**

1. What is Computer Ethics?
2. Introduction to ethical frameworks and moral philosophy
3. Ethics as involving both personal choice and social choice (i.e. social policies have ethical import).
4. Codes of ethics and professional responsibility
5. Ethical reasoning: evidence and argument
6. Technology as an embodiment of values

### **Additional Topics (at the instructor's discretion)**

7. Privacy (e.g., cryptography, Clipper chip, databases, data mining) and surveillance
8. Viruses, hacking, security
9. Gender, racial bias; diversity in the workplace
10. Digital divide
11. The politics of technology and computers
12. Intellectual Property
13. Electronic Voting
14. Globalization and offshoring of software development jobs
15. Electronic Waste
16. Computers, Free Speech, and Internet Censorship
17. Commons-based Peer Production (such as seti@home and wikipedia)
18. Cyberspace

**Note:** Not all of the above topics can be covered in-depth in ten weeks. The goal is to present a coherent subset of the above topics as the instructor sees appropriate.

### **Additional Information**

This course examines the influence of technologies in human affairs, with the explicit purpose of examining how technologies embed particular ethical positions and have particular social effects. Even a simple choice such as whether a government website includes features that enable use by people with visual impairments reflects an ethical choice about equality of access that has social and political implications.

Technologies do not simply happen. They are explicitly designed by the human hand and mind for the particular effects that they bring about. Technologies influence social relationships, economic systems, and political power, and in doing so shape human futures. Conversely, public policies, economic systems and social relationships influence the development of technological systems.

In this course, students are viewed as moral agents, capable of autonomous judgment and political action. Its purpose is to help students become more aware of the ethical, social, and political effects of the technological choices that they and others are making, and of their responsibilities as computing professionals. During this course, students will explore fundamental theories of ethics, examine codes of conduct and professional responsibility, and engage in ethical reasoning concerning particular technological choices. Ethical reasoning is viewed as intellectual work that involves the use of evidence and argument for supporting truth claims and ethical claims. Writing will be the main tool for critical evaluation and communication, and speaking will be a secondary tool. Effective writing is increasingly becoming an essential skill both of professional software developers and of citizens in a democratic and literacy-dependent world. This course is reading- and writing-intensive, and it satisfies the upper-level writing requirement for bachelor's degrees.

This course will also examine specific socio-technical developments having broad social impact, such as electronic voting, e-waste, and off-shoring of software development. These will serve as concrete applications of the ethical and socio-political ideas explored earlier. As the public policies related to these topics are far from settled, students will examine some of the controversies surrounding them, the ethical theories and social implications embedded in both the technologies and their related public policies, and the avenues for individual and democratic influence on the development of the technologies and policies.