CSCI 494 Social and Ethical Issues in Computing Spring 2012

Cary G. Gray
Office: Science 159, x5875
Office hours: MWF 8:45–10:20 a.m.
                  M 3:15–4:30 p.m.
                  by appointment
I am typically in my office much more than the posted times, and you are welcome to stop by whenever my door is open. Check with me ahead of time if you want to be sure that I'll be there outside scheduled times.

Class meetings

T 1:15–3:05 p.m., Sci 181
Final meeting: 10:30 a.m.–12:30 p.m. on Tuesday, May 1

On-line resources

Additional (and updated) course information will be available at the class page at

> http://cs.wheaton.edu/~cgray/csci494/

I will e-mail you *at your college address* when there are major updates. Be sure that you frequently read mail sent there.

Description

CSCI 494. Social and Ethical Issues in Computing.
Study of the ways in which the computer and communications revolution is changing society. Develop an awareness of and sensitivity to the ethical issues that arise in computer science and related professions. Prerequisite: Senior standing in the major. (2 hours)

CSCI 494 is the capstone course for the computer science major; as such it is supposed to provide an opportunity to sum up your study of computing at Wheaton and how it relates to other disciplines you have studied and to your faith. Because this is a capstone course, you should be taking it near the end of your time at Wheaton: you should be close to completing both the computer science major and the general-education requirements. (If you have not taken one of the required courses in Philosophy or Christian Thought, in particular, you should take it this semster instead of this course.)

The way our capstone is defined by the catalog does not leave us much time for reviewing the discipline; we will instead focus on how computing and related technologies interact with humane concerns. In this class you will:

- develop a greater awareness of how computing (as well as technology more generally) interacts with non-technical concerns;

- identify the kinds of issues that are raised or shaped by information technologies;

- analyze specific issues at the intersection of computing and social concerns;

- articulate your own responsibilities from both a Christian and professional perspective.

This is not a typical computer science course: it will involve primarily reading, discussion, and writing. There will be no programming assignments. The level of your *prepared* participation in class will be the principal factor that determines how much you get out of this course.

Grading and assignments

Your grade will be based on:

Class participation (20%) The quality of your particpation is important. Your written responses to readings (see below) are included in this portion of your grade.

Leading a class discussion (10%) You will, with another student, be responsible for leading the discussion on one class day. Student-led discussion days are indicated by letters at the right in the schedule below; you will have an opportunity to sign up (or be assigned) at the second class meeting. Details will be provided separately.

Short essays (30%) A few short essays will be assigned during the term. These will typically be 1–2 pages in length. These can be informal, but should be organized well and reflect careful thought about the assigned topic. (Information on the first is included below; other dates and topics will come out later.)

Final paper (40%) Think of this as your take-home final: you are to write a 10–16 page paper on a topic related to the course. Details will be provided later.

All written work should be typed, neatly formatted, and double-spaced. Turn in hardcopy unless specifically instructed otherwise; you may print two-sided to save paper. For purposes of counting pages, use a 10–12 point font with 1-inch margins. Make citations in standard form (such as MLA or a common form supported by LaTeX/bibTeX), with the special case that you you may reference all provided articles and textbook selections with the bracket form shown below and on the class readings page.

You should keep a copy of all of the writing you do for this course, as a record of your thinking. That will be especially helpful toward the end of the semester. I strongly recommend that you you keep a logbook (journal) to track your thoughts during the semester.

Attendance

Because participation is such an important part of the course, there will also be a significant penalty for absences and late arrivals. Your late arrival would interfere with class for your fellow students; so attendance will be taken at the *beginning* of each class meeting, and you will not be counted present if you arrive late. (I suggest you plan to arrive a few minutes early.) You will be allowed up to two absences without penalty; for each subsequent absence your course grade will be penalized one-half letter per meeting. If you must miss, I can consider accommodating you only if you behave responsibly—including letting me know in a timely manner. If you have another obligation that interferes with your timely arrival, I expect you to keep me informed—just as you would an employer.

Assigned and additional readings

The textbook for this class is:

> Hester and Ford, eds., *Computers and Ethics in the Cyberage*, Prentice-Hall, 2001.

In the schedule below, there are readings from the textbook and other sources. Some of the additional readings are available online, in which case you will find a link in the online version of the readings list. I will also distribute a packet to cover the readings that are not readily available online.

The assigned readings should be considered a minimum. You will find links or references for additional readings in the online list, and I will continue to update the list during the semester. You should be looking for articles in regular news sources; feel free to point me (or the whole class) to anything interesting and relevant that you find. Look for sources of high quality; some blogs do qualify (I've included pointers to some), but most would not.

You are required to keep up with two additional online sources. The RISKS Digest publishes irregularly; it it most easily accessed via the online archive at

http://catless.ncl.ac.uk/Risks/

You are responsible for all issues from 26(68) (dated 28 December 2011) through Apr. 27. You should check and read RISKS at least once a week. You should also track the Freedom to Tinker weblog from Princeton's Center for Information Technology Policy, at

`http://www.freedom-to-tinker.com/`

Note that RSS feeds are available for both of these.

Watch for other events and news items during the semester, and plan to share them with the class.

Responses to readings In preparation for each class meeting that has assigned readings, you should write at least three questions, observations, or other responses to the readings (required or optional). Each item could be as brief as a single sentence. These should be emailed to me by noon the day before each class meeting, with the subject "CS 494 for *date*". I recommend that you include those thoughts as part of the notes you bring to class.

For some class meetings, you may be given specific questions or topics for which to prepare. When that is the case, you should turn in to me (either by email or hardcopy) a snapshot of your written preparatory notes by noon the day before class.

Initial schedule and readings

The semester schedule (and full syllabus) should be available by next week.

The major headings in this course are:

- Professions, responsibilites, and ethics

- Technology and information technologies

- Property

- Power and wealth

- Privacy and community

- The nature of persons

There may a bit of shifting, but this gives you an idea of what to expect.

Here are the readings for the first several meetings:

Jan 10 [Lam88]

Jan 17 [Den01], Chapter 6 from the textbook, [AJGP93], and appendix A.

Jan 24 Chapters 1 and 2, [Pos90].

The online version of this handout links to a page with more information (including links to the articles).

Initial assignments

Essay 1

Write 1–2 pages on the following:

> How has your study of computing influenced or otherwise affected your faith? Note that some effects may be indirect: has your study of computing affected the way you think or the way you look at the world?

Bring a copy to class on January 17. We'll take some time at the beginning of class to talk about this before you hand it in.

You'll come back to this topic at the end of the semester. Please pay attention to the assigned topic: you are *not* being asked here to write about how your faith has influenced your study of computing.

Response to readings

Do not forget to send in your response to the readings before noon on Monday. And be sure to include RISKS and Freedom to Tinker.

Leading a discussion

In the near future (once the class schedule firms up), you'll be asked to sign up for a day on which you and a partner will be responsible for leading the class discussion. Be looking ahead at your schedule and thinking about topics that especially interest you.

Final paper

Start thinking about a question/topic for your final paper.