

## **Social Implications of a Computerized Society (CMPT 320)**

**Simon Fraser University**

**Instructor: Oliver Schulte**

### **Readings**

Textbook for the course: *A Gift of Fire*, 5<sup>th</sup> edition, Sara Baase, Prentice Hall. You can probably find a used copy, certainly for the 4<sup>th</sup> edition. The 4<sup>th</sup> edition has enough content overlap to be usable for our course. However, many section numbers have changed, so users of the 4<sup>th</sup> edition would have to match section numbers from the 5<sup>th</sup> edition.

I will also assign extra readings, such as articles from the general press, which will be from on-line sources, or else made available through library reserve or the course website.

### **Overview**

This course covers a number of issues related to computers: social, legal, philosophical, ethical and economic. These are issues that you will likely face as an information technology professional, but also as a member of a complex technological society. Specific topics to be covered in the course include the following.

- Consumer data and privacy.
- Freedom of speech and attempts to censor the Internet. International issues.
- The growing use and abuse of social media
- Anonymity and spam.
- Intellectual property issues, copyright and fair use. "Piracy".
- Computer economics: automation, offshoring, productivity, network effects.
- Computer errors and failures. Responsibility for failures.
- Ethical issues for computer professionals
- Computing Technology and Climate Change (block chain)

Optional topics include the following; we will cover these depending on time and student interest.

- Hacking, online scams, and other computer crimes.
- Computers in the workplace: effects on employment, the gig economy.
- Artificial Intelligence: The singularity, self-driving cars, bias in algorithms

At the end of the course, students should be able to:

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- distinguish and articulate different issues with the use of computers and technology in general.
- be aware of the conceptual foundations of these issues (philosophical, legal, economic).
- be able to apply the course material to give reasoned arguments for their positions on specific problems arising from technology.

### **Class Format**

SFU policy rules out dual teaching: every class is taught either as an in-person class or as an on-line class but not both. **This is an in-person class.**

- Exams must be taken in a classroom.
- Quizzes may be held either in-class or on-line (announced ahead of time).
- Lecture slides will be posted.
- There will be no lecture recordings.

This class emphasizes broad conceptual issues, and furthers communication and analytic skills, so I aim to encourage discussion alongside the lectures. To encourage discussions, we will break into groups and engage in debates where individual students or groups take different sides of an issue. Also, a group of students may give a presentation on the readings of that week. Class discussion will be by far the most fruitful if everybody prepares the readings. Cellular phones, iPods and similar devices that make noise are not allowed during lecture times. I plan in-class surveys using mobile Canvas; **you must be equipped to take part in these quizzes.**

### **Studying and Workload**

The reading assignment for each week is given on the lecture schedule. You should read each assigned reading at least *twice*. It's a good idea to form study groups/pairs for discussing the readings. I expect that it will take you about 8 hours to do the readings for each week twice. This should be enough to prepare for the quizzes. Thorough reading will also prepare you for the exams.

### Getting in Touch; E-mail

*Face-to-face.* The best occasion for discussing aspects of the course content is in my *office hour*. If you can't make it in person, feel free to *call me during my office hour*. If you leave a message, state your name and number clearly so I can get back to you. A brief description of your issue helps. I am planning to hold about half my office hour on zoom depending on what works best for the students.

There will be some time *after class*. You can make an individual appointment with me or with the TA, as well.

*Email.* I process email only twice a week, so if you want a faster reply than that, please use the in-person avenues. E-mail is an inefficient way to carry on a discussion, and I will not have time to send you back more than a couple of sentences. You should first look at the course web page, course syllabus and the textbook for information.

*When to send email.*

- For practical or organizational problems.
- To make a special appointment.

If you send me or the TA e-mail, please **enter “320”** somewhere in the subject line.

*When not to send email.*

There are various types of information that you can get from the syllabus, the posted course schedule, in class, from me during my office hour, or from your fellow students. These are not appropriate for e-mail queries and I may not reply by e-mail but only in class. Examples include:

- When is my quiz/midterm/due date?
- What did we cover in class last week?
- Do I need to buy the textbook?
- What are you looking for in this exam/paper?

On-line support for exams and papers will be via the public discussion forum. **There will be no private email support for graded components.**

### **Marking.**

Your term grade is calculated as

- Final Exam 40%
- Midterm Exam 20%
- Quizzes/participation 10%
- Term Paper **or** Short Paper + Presentation 30%

*Final Exam.* There will be a final exam. The exam is cumulative over the course, with emphasis on the material covered in the 2<sup>nd</sup> half since the midterm exam. The format of the final exam will contain questions similar to the midterm, plus discussion/essay questions. The final exam accounts for 40% of your final mark.

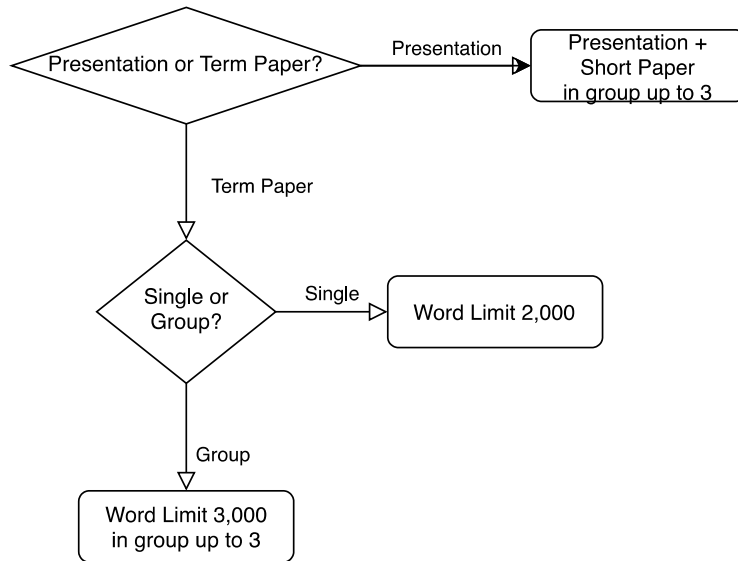
*Midterm Exam.* There will be an in-class midterm exam. The exam tests mostly your understanding of the course readings. Most of the exam will be in the format of: multiple choice, short answer, fill-in-the-blank, match concepts, etc. The midterm exam accounts for 20% of your final mark.

*Quizzes and Participation.* We will have regular quizzes to give you immediate feedback on how well you have followed the course material. The quizzes will cover both material from the lectures and from the text. I will run them as on-line quizzes using the Canvas system. The exact number of quizzes will depend on the class dynamics; roughly I'm planning for around 10 quizzes. I will discard the worst 2 quizzes for each student, to allow for absences, technical problems, short-term illness etc. The average of the remaining quiz marks is your overall quiz mark. For some very active or passive students, a participation component may also reflect the level of class activity. The average quiz mark/participation mark accounts for 10% of your final grade.

*Term Paper **or** Short Paper + Presentation.*

For the remaining 30% of the course mark, there are two options, Term Paper only, **or** Presentation + Short paper. The flowchart illustrates them.

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1. *Term Paper only.* A term paper for a single student should be around 2000 words (not counting a reasonable length bibliography). You can submit a single paper as a group of 2-3 students. For a group the word limit increases to 3000 words.

Marking Criteria for the Paper:

- Correct Description of Course Material (30%)
- Writing (Grammar, style, clarity, etc.) (20%)
- Quality of Argument, Originality (50%)

More instructions on the term paper will be posted on the course website. The due date is April 4 to allow enough grading time.

For a mark of “outstanding” (A), your paper must develop some ideas of your own, such as a new argument for the issue you are considering, or a criticism of an argument in the readings. In the paper you should also consider objections to your argument. In news paper language, an A paper is an opinion piece, not a report. A mere report or summary will earn a mark of at most 70%. Plagiarism will lead to a mark of 0 on the term paper and a report to the department.

or

2. *Presentation + Short Paper.* If time permits, you may choose to give a presentation, either by yourself or with one or two other students. You must also submit a short paper *individually*, around 1000 words (not counting a reasonable length bibliography). Your total mark for this component will be the average of your mark for the presentation and the short paper.

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Because of time constraints, not every student will be able to give a presentation; the limit will be one **presentation per class**. Presentations will be scheduled on a first-come, first-served basis. If you miss a scheduled presentation and no free time slot is available, you will have to take the term paper option instead. I will not schedule a presentation for the last class.

*Details on the Presentation.*

The presentation should last around 10-15 minutes. If you are using overheads, a good rule of thumb is to prepare no more than 10 overheads. The presentation topic should be close to the readings for the week on which you are presenting; specifically, it could be on the readings from the same week, the week before, or the week after. If you like, you can work with a partner or two on your presentation. Two people presenting together will receive the same presentation mark. Even if you do the presentation with a partner, you should write the short paper *on your own*.

Marking Criteria for the Presentation:

- Correct Description of Course Material (40%)
- Originality (30%)
- Liveliness (15%)
- Clarity (15%)

For a mark of “outstanding” (A), your presentation must develop some ideas of your own, such as a new argument for the issue you are considering, or a criticism of an argument in the readings. A mere summary will earn a mark of at most 75%. *I encourage you to come see me during my office hour before your presentation.*

*Details on the Short Paper.* The paper should be around 1500 words (not counting a reasonable length bibliography). I encourage to share a draft with us in office hours, the week before your presentation.

Marking Criteria for the Paper:

- Correct Description of Course Material (30%)
- Writing (Grammar, style, clarity, etc.) (20%)
- Quality of Argument, Originality (50%)

For a mark of “outstanding” (A), your paper must develop some ideas of your own, such as a new argument for the issue you are considering, or a criticism of an argument in the readings. If space permits, you should also consider objections to your argument. A mere summary will earn a mark of at most 70%.

### **Excuses, Extensions, Academic Concessions**

The standard excuse for missing any part of the course requirements (assignment deadlines, midterm exam, final exam, etc.) is a medical problem. You should discuss other reasons with me, preferably in advance. As a rule, I will require *documentation* of your problem.

- For course components other than the final exam the SFU self-declaration form ([https://www.sfu.ca/content/dam/sfu/students/academicsuccess/academicconcessions/2022-SFU\\_AcademicConcession\\_SelfDeclarationForm.pdf](https://www.sfu.ca/content/dam/sfu/students/academicsuccess/academicconcessions/2022-SFU_AcademicConcession_SelfDeclarationForm.pdf)).
- For the final exam, the standard [SFU medical excuse form](#) to be filled out by a physician. You must be available for a make-up exam the day after the scheduled final.

If you have a valid excuse that warrants an academic concession for missing part of the class work, I will transfer the weight of what you have missed to the weight of the *final exam*.

The Faculty of Applied Science has created a system for requesting course concessions. <https://coursys.sfu.ca/forms/apsc-fas-academic-concession/> You must use their form for me to consider an academic concession.

### **Grade Challenges**

If you wish to have a grade reconsidered, write a brief note stating your reasons. Typically, the note will outline what you take to be the requirements of a good answer, and point out where you believe that you met these requirements. You should take into accounts any comments on your work that I may have provided. Your note will show me that you have understood the issues involved, and in a class of this size, will help me keep track of our discussions and special circumstances.

In general, I fully sympathize with unforeseen disasters such as the breakdown of your car, printer, computer, intimate relationship etc. but don't consider them valid excuses. If this worries you, I suggest you do your work ahead of the deadline and put in place alternative ways of getting it to class (e-mail, friends).

### **Students With Special Needs**

Students who require accommodation related to accessibility or disability should contact the Centre for Accessible Learning and follow their procedures <https://www.sfu.ca/students/accessible-learning.html> .

## **Plagiarism**

Plagiarism is a very serious academic offence, and will not be tolerated in this course. SFU's Code of Academic Policy (<http://www.sfu.ca/policies/teaching/t10-02.htm>) states:

“Plagiarism is a form of academic dishonesty in which an individual submits or presents the work of another person as his or her own. Scholarship quite properly rests upon examining and referring to the thoughts and writings of others. However, when excerpts are used in paragraphs or essays, the author must be acknowledged using an accepted format for the underlying discipline. Footnotes, endnotes, references and bibliographies must be complete...

Plagiarism exists when all or part of an essay is copied from an author, or composed by another person, and presented as original work. Plagiarism also exists when there is inadequate recognition given to the author for phrases, sentences, or ideas of the author incorporated into an essay.

A draft paper, proposal, thesis or other assignment may be subject to penalty for academic dishonesty provided the instructor/supervisor has informed the student(s) before the work is submitted...

Penalties imposed by the University for academic dishonesty may include but are not limited to one or more of the following: a warning, a verbal or written reprimand, reassessment of work, failure on a particular assignment, failure in a course, denial of admission or readmission to the University, deregistration, forfeiture of University awards or financial assistance, suspension or permanent suspension from the University or revocation of a degree.”