Computers and Society
CPSC 430

Lecture 1 – Introduction

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http://cs.ubc.ca/~kevinlb/teaching/cs430

COVID-19: Staying Safe

- **Masks:** All students in class are required by the BC Public Health Officer to wear a mask.
  - This will also help all of us feel as comfortable as possible engaging in class activities while sharing an indoor space.
  - For the purposes of this order, the term "masks" refers to medical and non-medical masks that cover our noses and mouths.
  - Please do not eat in class. If you need to drink water/coffee/tea/etc, please keep your mask on between sips.
  - Please note that there are some people who cannot wear a mask. These individuals are equally welcome in our class.
- **Vaccination**: If you are not yet vaccinated against Covid-19, vaccines are [available to you](), free, and on campus.
  - The higher the rate of vaccination in our community overall, the lower the chance of spreading this virus.
  - You are an important part of the UBC community. Please arrange to get vaccinated if you have not already done so.
- **Seating in class:** To reduce risk, please sit in a consistent area of the classroom each day.
  - This will minimize your contacts and will still allow for the pedagogical methods planned for this class to help your learning.
- **If you're sick, please stay home, no matter what you think you may be sick with (e.g., cold, flu, other).**
  - A daily self-health assessment is required before attending campus.
  - Do not come to class if you have Covid symptoms, have recently tested positive for Covid, or are required to quarantine.
  - In this class, the marking scheme provides flexibility so that you can prioritize your health and still be able to succeed.
  - Every class element except for the final exam will be conducted electronically.
- **If you are sick on a final exam day**, do not attend the exam. You must apply for deferred standing (an academic concession) through Science Advising no later than 48 hours after the missed final exam/assignment.

Course Description

- We'll explore the interplay between **information technology and society**, emphasizing ethical issues.

- You'll come away with an increased:
  - understanding of the **social and ethical implications** of computer use and abuse;
  - ability to **think critically and defend decisions** logically;
  - appreciation for **alternate points of view**.

- Our focus will be on **reading, writing and discussion**.
  - Each week students will complete an **assigned reading**, write a **mini-essay** in response, and **evaluate the work of others**.
  - Classes will emphasize discussion and debate.
  - The ability to speak, read and write fluently in English is **essential for success** in the class.

Grading Scheme

Weekly Essay Questions	45 %
Weekly Peer Review	20 %
Midterm Exam (essay resubmission)	10 %
Final Exam	25 %

- Attendance: important for your learning, but not required for grades.
- Midterm: resubmit an essay, double word limit.
- To pass the course, you must pass the final exam.
- I may change the exact percentage breakdowns shown here.
- This is **not an easy course—something to hand in *every* class**
  - On the other hand, you'll learn a lot, and students who work hard throughout the term can expect to do well.

Weekly Essays

- **Between Thursday, 3:30 PM and Tuesday, 1:45 PM (sharp!)**
    - Do **assigned readings** of up to one chapter from the textbook. Readings posted at http://cs.ubc.ca/~kevinlb/teaching/cs430.
    - Take a **multiple-choice quiz** online to test your comprehension.
    - Answer one **essay question** (your choice from a list of choices) and enter your answers online. You'll be allowed up to 2500 characters; that's less than one single-spaced page.
    - At first: do some **calibrated peer review**
        - This is practice for the following; details in a minute

- **Between Tuesday, 3:30 PM and Thursday, 1:45 PM (sharp!)**
    - Perform your own **peer review** of four randomly assigned students' written questions.

Grading Your Essays

- You'll **receive at least 3 or 4 peer reviews** of your work, each week
  - These reviews will be **double-blind** (you won't know who reviewed you)
  - You'll be graded on a five-point scale on four dimensions:
    - Was the essay **well structured**, stating a thesis, supporting it with argument(s) that are clearly related to this point and (if relevant) distinct from one another, and linking these arguments in a logical way?
    - Did the essay **do a good job of making its case**, choosing relevant arguments, backing them up with evidence and examples at an appropriate level of detail, and responding to contrary views as appropriate?
    - Did the essay demonstrate a **good understanding of the course's subject matter**, including both the topic and the wider context?
    - Was the essay presented **clearly and in correct English**?
  - You'll also get comments on each item, and an outline of your essay
- When you also **receive a review by a TA**:
  - only the TA evaluation matters for your grade
- When you are evaluated **only by peers**:
  - Each of your peer grades will be weighted in proportion to our estimates of your peers' **dependability** as graders
  - If you disagree with your grade **you can appeal**, and a TA will re-grade your essay
- Essays are worth **increasing amounts** as the term goes on
  - 3, 4, 5 % of final grade each week

Peer Review

1. **Calibrated peer review**

   Grading essays from previous years that we've graded already
   - Confirms that we all **understand the grading scheme** in the same way, and shows you examples of weak and strong essays

2. **Supervised peer review**

   Grading essays from this year when you haven't yet demonstrated proficiency at peer review
   - A **TA will grade the same essays**, and only the TA grade will count
   - The TA will also assess whether you made **thoughtful comments**

3. **Unsupervised peer review**

   Grading essays from this year once you've demonstrated proficiency
   - Your review may be **spot checked or appealed**: checked by TA
     - Spot checks: very positive ratings; severe disagreements; random
   - We'll update your dependability score based on your degree of agreement with peers (taking their own dependability into account) and, when available, degree of agreement with TAs

Estimating Dependability

- We maintain estimates of each peer grader's "**dependability**" via Bayesian inference
  - The key idea is that calibrations and assignments graded by TAs give us information about which **graders are more reliable**
  - we then bootstrap this knowledge to decide how much to trust each grader on assignments that were **not graded by a TA**
- Your dependability score is our estimate of *effort * (1/variance)*
  - *effort* is (1 - probability that you assign some value near the class average without considering the essay)
  - *variance* is your tendency to differ from TA scores
- The system starts out with the assumption that all students have **low dependability scores** (specifically, low effort and high variance)
- As you grade assignments/calibrations, we **update these beliefs**
  - doing **more calibrations** both helps you get better at grading and gives us evidence to counteract the system's pessimistic initial belief
  - if you always assign values close to **the class average**, we'll assign you a low effort probability
    - you need to properly identify both strong and weak assignments in order to achieve a high dependability score.
  - if you grade **too harshly or too generously**, we'll assign you high variance

Peer Review: Reviewer Perspective

- Do **at least 3 calibrated reviews** (more the first week; can always do more)
  before 1:45 PM every Tuesday that you're required to do so
  - Week 1: this means everyone!
  - Week 2+: only if required

- Do **assigned reviews of others' essays** before 1:45 PM Thursday

- How we'll calculate **your peer review grade** (20% of the course):
  - **Scaled dependability scores**, snapshotted each week
  - reviews worth **increasing amounts**: scaled to 1.2, 1.8, 2.3 % of final grade per week
  - If you don't do everything assigned (reviews; calibrations when required) your grade will be **scaled down**; see web page for formulas

In Class Attendance and Participation

- Active participation in the class is a key element of this course
  - "Flipped classroom": lectures don't focus on transmitting information
  - Instead, they focus on interaction, discussion and critical analysis
- Past years' evaluation heavily weighted attendance and participation. But this year
  - some students unable to join class initially because of visa issues or quarantine requirements
  - throughout the term, we don't want anyone coming to class when they might be sick.
- So this year we have a new evaluation metric that doesn't penalize your grade if you miss class but reduces your workload if you do
  - Starting next week, we'll use a system in Mechanical TA to adjudicate in-class discussions
  - If you want to contribute to a discussion, you click a button to raise your hand
  - Every time I call on someone
    - one student with a raised hand will be randomly selected
    - every student who had a hand raised will be recorded for participation purposes
  - Participation points can be used to reduce your peer grading quota
    - A key focus of class discussions is learning to critically consider and respond to other points of view
    - additional peer grading is the best substitute available for students who aren't able to attend

How You Collect Participation Points

- If it's your first time raising a hand that class, you get 10 participation points
- Thereafter, you get 1 participation point
- If you're chosen to speak
  - you will probably not be chosen to speak again during the same class
    - unless the only hands raised are from students who have already spoken
  - you'll automatically get participation points as though you raised your hand throughout the remainder of the class
- There are consequences for trying to game the system
  - If you clearly just raised your hand for points rather than to contribute to the discussion, you'll get zero points for the entire day
    - regardless of how many other points you might have been awarded earlier that day
  - If you use MTA to raise your hand while not physically present in the class, this will be treated as a case of academic misconduct and serious penalties will apply
    - TAs will be able to see a real-time list of which students have put their hands up along with their UBC Card photos, and may verify physical attendance even for students who are not called upon

How You Use Participation Points

- Two kinds of participation points:
  - "new points": those you gained in the most recent week
  - "regular points": everything else

- Every week, you tell us whether you'd like to spend regular points for further peer grading reductions
  - If you don't make a selection, by default you're eligible
  - I recommend that you not stockpile your points unless you're planning around a deadline

- Each week, you'll start out with a requirement to perform 8 peer reviews of other students' essays

- Right before assigning peer reviews at the end of Tuesday's class:
  - We'll reduce your peer grading assignment by up to 4 essays at a cost of 5 new points per reduction.
    - if you come to both classes and raise your hand once each, you'll reduce your peer grading to 4 essays instead of 8
  - If you have new points left over beyond the initial 20, we'll convert these to regular points
  - We'll determine a number k of additional peer grading reductions that we'll allow across the entire class
    - This number will depend in part on how many students have taken on extra peer grading because they did not come to class along with our estimates of these students' demonstrated peer grading reliabilities
    - We will always set k to at least 20% of the number of students registered in the class
  - We'll determine a "price" c in participation points that "sells" exactly k peer grading reductions to eligible students
    - i.e., the "market-clearing" price at which supply meets demand
    - Each student who receives a reduction will have c participation points deducted from their regular points balance for each reduction;
      - students who have participated extensively may receive more than one reduction
    - Students who receive no reduction will keep all of their points to use in subsequent weeks
      - even students who only participate occasionally can eventually receive peer grading reductions

This all starts right away!

- Before **next Tuesday**:
  - ☑ **read all of Chapter 1** of the textbook
  - ☑ **log in** to "Mechanical TA" and:
    - ☑ perform **calibrated peer reviews**; try to get into the independent pool
    - ☑ complete a **quiz** (or you can't do peer reviews later)
    - ☑ write a **short essay** on your assigned topic
  - ☑ Come to class with a laptop or phone so you can use MTA to "raise your hand"

- Don't leave this to the last minute!
  - It might take you a bit of time to get your accounts set up, etc.
  - Heddy will have (Zoom) office hours to help out with such issues

"What if something goes wrong, and I can't submit an essay/review?"

- We'll **drop your worst two essay and peer review grades**, allowing for situations in which:
  - you miss the (firm) deadline
  - you're sick, out of town, have a conflict with another course, …
  - you face hardships due to the pandemic
  - you register for the course late
  - you get a poor grade on one essay

  (We'll renormalize your grades accordingly)

- Other extensions or waivers will be granted only in **truly exceptional circumstances**.
  - Unless you have an exceptional excuse, you'll simply get a grade of zero.
  - (Brief) illness isn't an exceptional excuse, see above.
  - Registering in the course late isn't an exceptional excuse.
    - If you're on the waitlist, start actively participating now!

What if I'm on the wait list?

- Historically, most people on the wait list **get into the class**
  - but it's not up to me, up to undergrad advisors in the main office
- Main office will prioritize the wait list by **participation in the course**
  1. **highly active participants** (ordered by standard waitlist priority)
  2. **fairly active participants** (ordered by standard waitlist priority)
  3. students who have participated **little or not at all** (won't get in regardless of priority)
  - make sure you hand in each week's work
- If you are admitted, no allowance for having been on wait list (unless you want to use up a late day right away)
  - wait list registrants should be able to access MTA, Piazza
  - if you have troubles, let us know!

Textbook

- We will be using the textbook *Ethics for the Information Age, 8ᵗʰ Ed*, by Michael J. Quinn.

- It's important that you have a copy, because we'll be reading the whole thing—starting this week!

- Old editions exist, but you're responsible for all material in the 8ᵗʰ edition.

MICHAEL J. QUINN

ETHICS
for the information age

8th edition
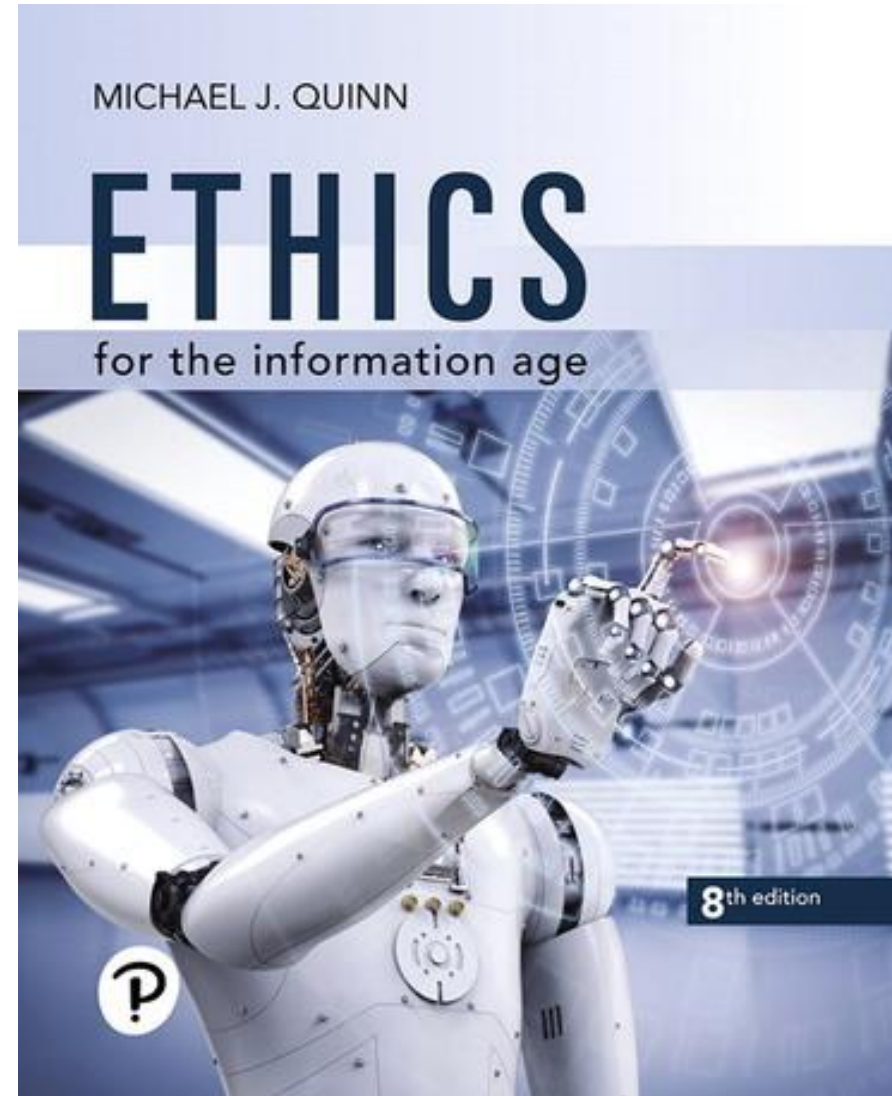
Topics (pretty cool stuff, actually ☺)

- History of computing, storage, networking (next 3 classes)
- Ethics & Argumentation (5 classes)
- Social issues (1 week each):
  - Networked communications
  - Intellectual Property
  - Information Privacy
  - Privacy and the Government
  - Computer & Network Security
  - Computer Reliability
  - Professional Ethics
  - Work & Wealth
- Next class:
  - break into 16 groups
  - get assigned a statement and a position for or against
  - develop arguments for your assigned position
  - present your list to the class; we'll discuss briefly
  - everyone votes on the issue (you vote freely)
  - we'll revisit these questions throughout the course. You'll get to see if your opinions change.

Teaching Team

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