01: Syllabus

Instructors: Abouelkhair, Becker, Jung, Petrick, Reetz, Roh

Other course personnel: see website for details

- ISA (Instructional Support Assistants)
- IAs (Instructional Apprentice)
- ISC (Instructional Support Coordinator): Karen Anderson
- TAs (Teaching Assistants)

Web site (main information source): `https://student.cs.uwaterloo.ca/~cs135/`

Themes of the course

- Design (the art of creation)
- Abstraction (finding commonality, neglecting details)
- Refinement (revisiting and improving initial ideas)
- Syntax (how to say it), expressiveness (how easy it is to say and understand), and semantics (the meaning of what's being said)
- Communication (in general)

The approach is by learning how to **think** about solving problems using a computer.

Course Structure

- Lectures: Instructors present the core course material. Slides are available on the web site along with resources that we provided during the pandemic. Lectures will include "clicker questions" to help you assess your understanding. They are part of your course grade.
- Tutorials: Course staff will work through a problem or two that are similar to the upcoming assignment. They will "think aloud" to show their thought processes, how to debug, etc.
- Assignments: Individual work to demonstrate what you've learned, receiving feedback from course staff.
- Exams: An opportunity for us to assess what you've learned.

All of this is supported by office hours in which you can receive more individualized help.

All times for the course are with respect to Waterloo time

Details: Lectures

Tuesdays and Thursdays, 80 minutes

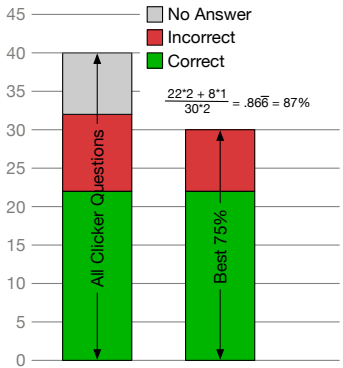
Slides: available on the web site

Participation marks: to encourage active learning

Details: Participation marks

These encourage active learning and to give you quick feedback on your understanding.

- Several multiple-choice questions during the lecture covering material just discussed.
- Students respond using iClicker Cloud (web or app on your phone). Register at `https://student.iclicker.com`.
- After all responses are collected, look at the results and discuss as necessary.
- Marking: two marks for the correct answer; one mark for any other answer. We use the best 75% across the entire term to calculate 5% of your final mark.
  - The best 75% is to account for co-op interviews, sick days, times you overslept, etc.
- Attend the lecture you are registered in to earn the marks.



- Held on Fridays in smaller groups than lectures.
- Most are led by an IA (Instructional Appentice) or ISA (Instructional Support Assistant).
- Work through one or two complete examples in more detail than we have time for in class.
- "Think aloud" to show the complete process.
- Problems are not published. Often similar to the upcoming assignment problems.
- Lots of opportunities for questions.
- Take your laptop.

You should definitely be attending if your assignment marks are less than 80%.

Details: Assignments

Timing: About 10 assignments, typically due Tuesday at 9:00pm, Waterloo time.

Software: DrRacket v8.14(`https://racket-lang.org`)

Computer labs: MC 2062, 2063, 3005, 3027. Available for your use, but no scheduled labs. Most students use their own computers.

A00: Due soon. Must complete before the due date for Assignment X to receive marks for Assignment X.

Stage1 Submission: Many assignments will have a portion due on Thursday evening, 11:00PM. (Automatic extension for everyone to 8:00am Friday morning.)

Stage2 Submission: The complete assignment. More on process in A00. Submit early; submit often. No email submissions. (Really. We mean it.)

Assignments are individual work; assume ChatGPT is like another student in the course.

Details: Exams

CS135 will have one midterm exam and one final exam:

- Midterm (Oct 28, 2024)
- Final (date to be determined by the Registrar)

Do not make holiday travel plans before you know the date of all your final exams AND take into account the snow dates.

Some old exams are available in the MathSoc Exam Bank (`https://services.mathsoc.uwaterloo.ca/university/exambank`). Be careful! The course has changed since those exams were used.

We do not release answers to the old exams. We're happy to discuss your attempted solutions during office hours.

Marking scheme

Points available:

Work	In-person	On-line
Assignments	25	30
Midterm exam	25	10
Final exam	45	20
Class participation	5	5

You mark will be the percentage of the available points that you earned.

To pass the course you must:

- ⇒ earn at least half the available assignment points and
- ⇒ earn at least half of the available exam points.

60% required for entry to CS136.

Getting help

- Ask questions in class – if it's relevant to the whole class.
- Talk to your instructor after class.
- **Office hours**: Instructors and ISAs hold office hours throughout the week.
  - Some may be in-person; many will be virtual via MS Teams
  - Times posted at CS135 > Help > Office and Consulting Hours
  - Instructions for MS Teams at CS135 > Help > Using Microsoft Teams
- **Discussion forums**: We use Ed for online discussion and Q&A.
  - Use meaningful subject headings (not just "A3 problem"; what's your specific problem?).
  - Search previous posts before posting; **Don't duplicate!**.
  - Possible to post privately if necessary.

All help is student-driven. You bring the questions.

You must be able to solve problems on your own to pass the course.

Suggestions for success

Read the CS135 ~~Survival~~Thrival Guide as soon as possible.

- Keep up with your assignments. Start them early. **This is key!**
- Go over your assignments and assessments; learn from your mistakes.
- Visit office hours as needed; earlier is better.
- Follow our advice on approaches to writing programs (e.g. design recipe, templates).
- Read your mail sent to your UW email account. We will only send to and reply to your UW email account!
- Integrate exam study into your weekly routine.
- Maintain a “big picture” perspective: look beyond the immediate task or topic.

Academic integrity

- You must do your own work.
- Policy 71 - Student Discipline: plagiarism, sharing assignments, etc.
- Running out of time? It is better to hand in a partial assignment or nothing than to hand in someone else's work.
- Do not post code from your assignment to the discussion forums.
- Don't post solutions to homework sites. We monitor them and flag plagiarism there too.
- ChatGPT...

Copyright and Intellectual Property

The teaching material used in CS135 is the property of its authors. This includes:

- These study modules
- Assignment specifications and solutions
- Assessments and solutions

Sharing this material without the owner's permission is a violation of their intellectual property rights.

Goals of this module

- You should understand how the course is organized.
- You should be familiar with the course resources available to you.
- You should know what you need to do to earn the mark you desire.
- You should know how to avoid plagiarism.

Welcome from the Instructional Support Coordinator

For CS115, CS135, and CS240: Karen Anderson (kaanders@uwaterloo.ca, MC 4010)

Several responsibilities, but main ones related to students:

- AccessAbility Services (AAS) liaison
- Absence declarations, Verification of Illness (VIF), other special circumstances coordination
- Instructional Support Assistant (ISA) hiring and supervision
- Grad student Instructonal Apprentice (IA) [tutorials] and Teaching Assistant (TA) [marking] supervision
  - collect student feedback on ISA, IA, and TA performance
- Cheating triage before submitting to Academic Integrity Office