
CPSC 103 Section 202

— Instructor: Jessica Wong —

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Teaching Team

- **Instructors:** Jessica Wong (me!) and Karina Mochetti (section 201)
 - Jessica: jhmwong@cs.ubc.ca
 - Karina: mochetti@cs.ubc.ca
- **Course Coordinator:** Deirdré Fang (cpsc103-admin@cs.ubc.ca)
- **TAs:** You'll have a chance to meet many of our TAs in tutorials/office hours/on Piazza. For this section, Sol, Trevor, and Kevin C. will be our lecture TAs.
 - Tuesdays : Sol, Trevor
 - Thursdays: Kevin Chen, Sol

Communication During Class

- Please don't post or share the link or the password for this meeting.
- During class, your lecture TAs will be in charge of the class chat. It is highly unlikely for me to be able to reply to messages sent to me individually through the Zoom chat.
- I will pause for questions every once in a while. You can choose to raise your hand and ask a question with your mic or type it into the chat.
- Don't feel pressured to turn your camera on!

Online Classes

- Online classes are hard for everyone. Something is bound to go wrong one way or another (e.g., Zoom glitches or an Internet connection is shaky).
- Please be patient and we will get through this together.
- We will be recording lecture BUT it sometimes takes a really long time for the recording to be ready. Unfortunately, there is nothing we can do about this. :(

What is this course about?

Introduce you to software design in a way that will let you write high quality programs specifically targeted at manipulating data in some area interesting to you.

You do NOT need to have a programming background!!

Course Organization

- 9 modules in total
 - 8 modules are skill based and the 9th is a project
 - First eight modules help you build the skills you need for the project
- Project
 - Take some data from a file, read it in, do something to it, and make a visualization of some sort
 - You can use your own data or we have some choices for you
 - Topic has to be appropriate for a school environment but doesn't have to be academic!

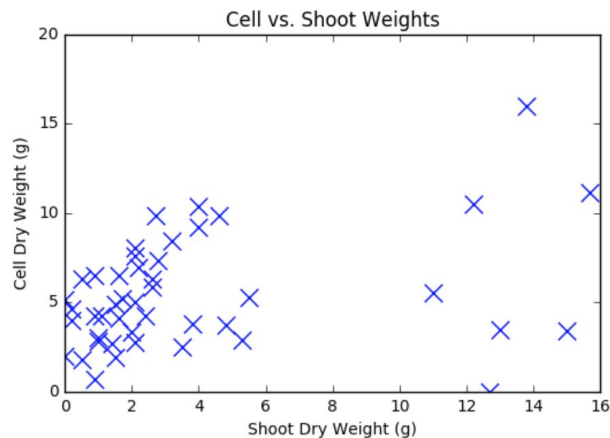
Project Example

- A former CPSC 103 student was doing research on the relationship between autotrophs and dried eelgrass
- His project focused on graphing his research data
 - You don't need to have research data on hand for this class!

Project Example

Data file (in CSV form)

Date		quadrat #	epi blade #	epi blade len	epi blade wid	GF/C + tin w	GF/C + tin w	epi_cell_dry	epi foil weig	epi wet weig	wet_epi_we	epiphyte dry	sheath length
20-Jan-16	Jan	1	NA	78.9	0.6	1.0983	1.1004	2.1	9.2	14.2	5	5	
20-Jan-16	Jan	2	NA	72.2	0.6	1.0826	1.0841	1.5	9.2	14.1	4.9	NA	
20-Jan-16	Jan	3	NA	77.9	0.7	1.0708	1.0725	1.7	9.1	14.3	5.2	NA	



Grade Breakdown (Copied From the Syllabus)

Exams

Midterm	15%	(Monday March 22 @ 6PM PST)
Final Exam	30%	(Date TBD)

Pre-Lecture Assignments 5%

Tutorials 15%

Worksheets 5%

Code Review 5%

Project 25%

Exams (45%)

- We will be using Zoom to invigilate.

You will need to have a functional camera (some students opt to use their phone as a camera instead). If this causes a financial hardship for you, please talk to your ESP. UBC has funds allocated to help.

- Exams will be held and submitted on **Gradescope**.

Pre-Lecture Assignments (5%)

- Due on Mondays
- We use the results from the pre-lecture assignment to shape class during the week

Tutorial (15%)

- Done **individually**
- Due on Wednesdays
- Tutorial attendance is not required but is strongly encouraged. It will be easier to get access to a TA for help.
- We will drop the lowest tutorial grade
- You have a chance to resubmit tutorials for half the marks lost in the initial assignment (more details about this on Canvas).

Worksheets (5%)

- Due on Mondays
- Graded on a 0/1/2 scale based on how much effort you put into completing the worksheet

Code Review (5%)

- Due on Wednesday
- A chance for you to take a look at some code you did not write and analyze it.
- Code reviews will involve many judgment calls, so we will add 10% on top of any non-zero final average and we will drop the lowest tutorial grade
- We will drop your lowest code review score

Project (25%)

- You will be assigned a project mentor to guide you through the project
- Consists of 5 assignments:
 - Proposal (1%) : due March 3
 - Milestone (10%): due March 26
 - Check-In (1%): due April 1
 - Final Submission (11%): due April 9
 - Demo Video (2%): due April 14

Minimum Passing Criteria

- Obtain a total score of at least 50%.
- Obtain at least 50% on the project
- Obtain at least 50% on the Final Exam.

Academic Conduct

- Please read the rules in the syllabus and follow them. Not following these rules will be unpleasant for **all** of us.
- Several academic misconduct cases were referred to the Science Dean's office in 2019W2.
- We really, really don't want to have to go through this process (but we will if necessary).
- When in doubt, ask us beforehand!

General Structure of Each Module

1. Do the assigned reading.
2. Submit the pre-class assignment on Monday.
3. Submit the worksheet for the previous week on Monday.
4. Class time (Tuesday)
 - a. Discuss commonly asked questions
 - b. Go over concepts
 - c. Work on the worksheet together
 - d. Go through examples
 - e. Repeat steps b to d.
5. Submit the tutorial on Wednesday
6. Code Review. Generally due Wednesday.
7. Class time (Thursday). Same flow as Tuesday.

See Canvas for a full list of all the deadlines for the course.

Websites Used in this Class: Canvas

- All our course resources are listed here. This includes your readings and any assignments we ask you to complete.
- Your grades will be found here.
- Links to the other websites we use will be in the sidebar (Gradescope will appear in the sidebar later in the term).

<https://canvas.ubc.ca/courses/58946>

Websites Used in this Class: Piazza

- A website for Q&A.
- **Please** ask questions! We like answering questions! Students are always welcome to answer questions too!
- If you are unsure about whether your question is appropriate to post for all students, post privately! We (or you) can always set it to public later.
- Sign up for our Piazza class by clicking on Piazza in the sidebar on Canvas.

Websites Used in this Class: Syzygy/Jupyter

- Jupyter is a web application that allows you to program and share code
 - A file in Jupyter is called a notebook
- Syzygy is the system we use to make Jupyter notebooks available to you
- The files required for worksheets/code reviews/tutorial or the slides/code files we go through in lecture can all be found there

Websites Used in this Class: Gradescope

- You will submit your exams here
- You will be able to find your graded exams on Gradescope
- You will submit regrade requests (if you have any) through Gradescope
- The link to this website will appear in the Canvas sidebar closer to the middle of the semester (don't worry about this for now)

How to Do Well in CPSC 103

- To get better at programming, you have to do lots of practice
 - The whole course is designed around this concept of practice
 - We'll have lots of time in class to work together on this
- Each module builds directly on top of the previous module. If something is confusing you, ask us as soon as you can!

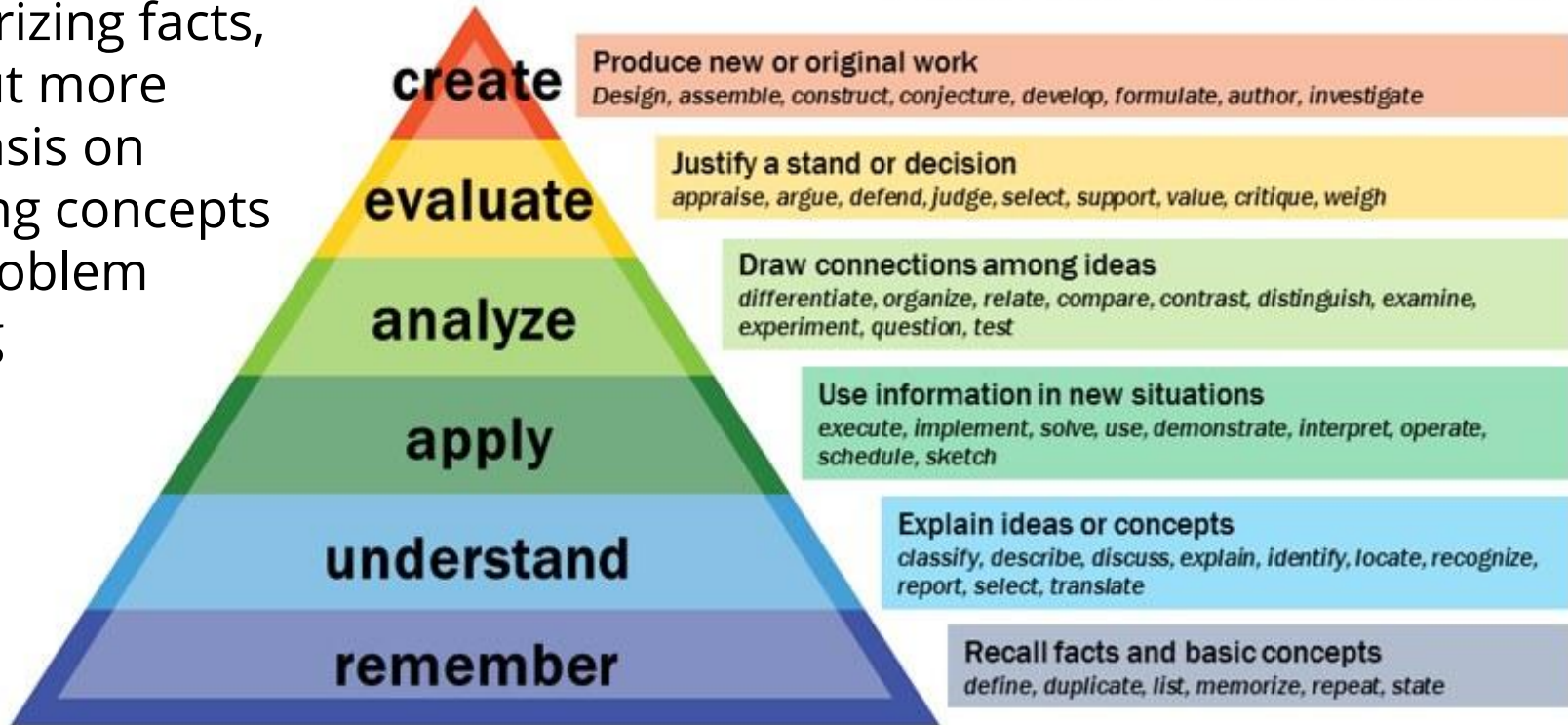
No judgement!

How to Do Well in CPSC 103

- Don't get discouraged if your code doesn't work right away! Debugging is something all computer scientists puzzle over. It's also a great way to think about how code works.
- **Start early.** Debugging can sometimes take a very long time

Focus less on
memorizing facts,
and put more
emphasis on
applying concepts
and problem
solving

Bloom's Taxonomy



Vanderbilt University Center for Teaching

<https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

To Do List

- Look around our course on Canvas
- Read the syllabus and do the syllabus quiz
- Join Piazza (Canvas → Piazza)
- Fill in the time zone tool on Canvas (Canvas → Student Time Zones)
- Complete the setup tutorial (We will also do this together during Thursday's class. You can also get help with this in tutorials this week too.)
- **[Optional]** Download and install Jupyter on your computer. Instructions can be found at Canvas → Administration → Programming Environment → Working Offline. If you need help with this, stop by any of the tutorials!
- Karina has a list of announcements here:
<http://www.cs.ubc.ca/~mochetti/CPSC103.html>

Ask Me Things

- For example:
 - What are your concerns?
 - Is anything unclear?
 - Is there something you want to talk about?
- Other topics welcome!