

# 2023W2 UBC Individual Instructor Report for CPSC 210 202 - Software Construction (Firas Moosvi)

Project Title: 2023W2 UBC Instructor SEI Surveys

Course Audience: 168
Responses Received: 48
Response Ratio: 29%

## **Report Comments**

# Recommended Minimum Response Rates

Class Size	Recommended Minimum Response Rates based on 80% confidence & ± 10% margin
< 10	75%
11 - 19	65%
20 - 34	55%
35 - 49	40%
50 - 74	35%
75 - 99	25%
100 - 149	20%
150 - 299	15%
300 - 499	10%
> 500	5%

# Legend

N: Invited n: Responded

**Frequency Distribution** 

SD: Strongly Disagree

D: Disagree N: Neutral

A: Agree SA: Strongly Agree

Creation Date: Tuesday, May 7, 2024



## **University Module Questions**

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Question	IM	PF	DI
Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.	4.2	78%	0.5
The instructor conducted this course in such a way that I was motivated to learn.	3.7	57%	0.6
The instructor presented the course material in a way that I could understand.	3.9	68%	0.5
Considering the type of class (e.g., large lecture, seminar, studio), the instructor provided useful feedback that helped me understand how my learning progressed during this course.	4.0	67%	0.6
The instructor showed genuine interest in supporting my learning throughout this course.	4.3	76%	0.5
Overall, I learned a great deal from this instructor.	4.0	70%	0.6

# **Faculty Questions**

## **Course Questions**

Question	N	n	SD	D	Ν	Α	SA	N/A	IM	DI
My academic background provided sufficient preparation for this course.	168	47	2	0	6	25	13	1	4.1	0.4
In this class, I applied facts, theories, or methods to new problems or situations.	168	47	0	0	5	25	17	0	4.2	0.3

Question	%Favourable
My academic background provided sufficient preparation for this course.	83%
In this class, I applied facts, theories, or methods to new problems or situations.	89%

## **Instructor Questions**

Question	Ν	n	SD	D	Ν	Α	SA	N/A	IM	DI
The instructor treated students with respect.	168	47	0	1	4	11	31	0	4.7	0.3
The ways the instructor implemented the course activities (e.g., in-class activities, labs, tutorials, field trips, online components, assignments) helped me achieve the learning objectives.	168	47	2	3	11	15	16	0	4.0	0.6
The instructor was intentional about cultivating a welcoming and inclusive environment that supports all students and encourages all students to participate.	168	46	0	1	6	15	24	0	4.5	0.4

Question	%Favourable
The instructor treated students with respect.	89%
The ways the instructor implemented the course activities (e.g., in-class activities, labs, tutorials, field trips, online components, assignments) helped me achieve the learning objectives.	66%
The instructor was intentional about cultivating a welcoming and inclusive environment that supports all students and encourages all students to participate.	85%

Open ended feedback

## Please comment on what your instructor did well to support your learning.

#### Comments

The instructor used very clear explanations and visuals to help students learn.

it is good and supportable

I appreciated the actionable responses to previous feedback about the course, and I could tell that the instructing team cared about student learning/outcomes.

The in-class lecture labs allowed for hands on practice of concepts we were learning, and Firas would walk around and be open to assisting students and asking questions.

During lecture, he explained went more in depth in topics rather than covering what was in the pre lecture.

Kind and caring professor. Was dedicated for student success.

GOOD

He took an interest in the subject, and an interest in letting students try to solve problems on their own before providing steps or the answers.

Best structured course I've seen so far. lots of practice materials for tests (lecture labs, practice projects), the new IDE testing system is so much better than paper (since you can submit it unlimited times, getting feedback so you can improve bugs), and the Labs also have unlimited submissions (which makes it easier to try new things, make mistakes—see Mark Rober's Super Mario Ted talk:) I like how labs grade your code with Code Coverage, bug—catching and implantation—code coverage helps you find what needs testing, which lets you create more tests to improve bug—catching, which help you figure out what's wrong with your implementation. It's hard to get stuck (especially with the lab bug—catching hints).

Each test, lab and project phase so far has very clear instructions. Lots of TA office hour opportunities. The learning material is also structured well, with summaries of each video in text, making it faster for you to review key concepts later.

Firas is an exceptional person, he's kind and considerate and you can tell he really cares about his students learning. However, I will say I think he could teach a different course for better learning outcome. He seems to also be learning Java alongside us, and doesn't always have the answers to questions in lecture.

Provided fair expectations for exams. Provided a lot of learning materials that are relevant to do well in exams.

Everything besides the project was conducted in a way that was constructive and helpful. I think material that was introduced in lecture was applied in labs with the right amount of challenge. Midterms felt like they accurately assessed our learning. Overall, everything in lecture was helpful and supportive.

He's nice

- Lecture labs were great learning opportunities
- Lecture tickets, and edx were well managed

Really good retake solution for midterm part2 work.

He made the class feel very relaxed, while maintaining the integrity of the course concepts and being a great professor. There was not once throughout the term where the instructor was the cause of any stress.

Went over questions in class

Firas was very receptive and attentive to student needs as a whole, providing appropriate accommodations, further explaining confusing course concepts, and maintaining a positive learning atmosphere in the classes. Also really liked the music played during lectures, while working on our own exercises or collaborating with classmates.

He is a very helpful and friendly prof with pretty chill teaching style.

Flipped class was not a great way to learn the material. I believe that the instructor lacked practical knowledge to support learning

I appreciate that Firas cared about student's understanding and learning in the course, he was always understanding and kind in the ed discussion forum.

He cared a lot about students and was very attentive to and supportive of our needs.

Answered questions

clear expectations for course content

## Do you have any suggestions for what the instructor could have done differently to further support your learning?

#### Comments

I think the instructor could make the course more interactive.

its good

It felt like I was doing my learning solo during the entirety of the course as I did not get sufficient meaningful learning from the lectures. I would have liked to hear about the choices and coding expertise from the instructor that would provide deeper understanding of the course content; however, it was more that the content of lecture labs was being provided by other students. Previous feedback was given prior to this course evaluation.

It felt sometimes that Firas was not always well prepared to give certain lectures, and was sometimes unfamiliar with the lecture labs we were working on.

I wish he spent more time going over the lecture tickets. Sometimes he doesn't even acknowledge them, just zooms straight past them. Especially since these types of questions are similar to what we see on exams, it would be nice to see what the instructor's reasoning is when solving these problems vs someone like me who is learning this for the first time.

N/A

Lectures sometimes felt like review of EdX.

GOOD

Sometimes I feel like the lecturing itself (not the in-class work, but the prof speaking) wasn't necessarily that relevant. It didn't add much more than the videos we were already required to watch.

I think more emphasis could be placed on actually enforcing the theoretical concepts during lecture hours themselves.

Instead of reading off the slides, it would be helpful to have more interaction among students, he improved over the second half of the semester though, allowing us to actively participate and encourage us to talk to our peers.

Explain the topics at hand more in class rather than relying so much on pre lecture lessons and videos. Did not feel like the professor really taught us much, learned more from the videos themselves.

I understand the rationale behind moving to PrairieLearn. However, I think moving to the online PrairieLearn workspace brings a few negative changes (not including the technical glitches, problems etc):

PrairieLearn does not give us simple suggestions for fixing minor things that any IDE would give you in practice. Coding for the project was vastly different than on exams. Exam problems really consisted of fixing small syntactical changes than an IDE like Intellij would just tell you to fix. A lot of the time is spent on things that are not that important to the logic of code.

TLDR; more energy and time consumed on fixing boring, small syntactical things than Intellij would just tell you to fix if you make a small mistake. Rather, we would benefit from spending this time on solving more complex problems.

A fix would be to use intellij or to incorporate some sort of suggestions into PrairieLearn IDE.

Have lecture labs be done together step by step.

Yes. I think the project was poorly done. I understand the design intent to simulate a project that might be seen in the real world. However, I think the biggest problem, was that we began our projects on shaky foundations. Beginning the project design early on in the course made things difficult as someone without prior Java experience was not well versed in how to design an effective system. I would have liked to see phase 4 having been split up, and in depth conversations with TA's to work out the viability of the program design.

More thorough understanding of the course material

Show full solutions in class to lecture labs.

n/a

#### Comments

Provide a certified resource to learn the basics of the language

I am not sure, didn't go that much. Not the instructors fault, I don't like the flipped classroom format.

Work in the industry and maybe explain the concepts that are present in the pre–lecture material

stop reading the slides

I personally do not enjoy the way CPSC 210 is run as a whole. I do not learn at all in any environment that is "flipped classroom" and as a second degree student, I hope I am not overstepping any boundaries when I say I find it very frustrating to be paying for a course in which I am essentially teaching myself and getting absolutely nothing from the lectures. I found I learnt better by NOT going to lecture and instead spending most of my time in office hours and using the internet to find explanations to these concepts. I was really disappointed with the quality of teaching in the course this semester, which is definitely disheartening considering I heard so many good things about it from previous students. I do believe the instructors made some meaningful changes to the way they answered questions and spoke to students about halfway through the course, which is appreciated. But ultimately, the flipped classroom approach did not work for me at all and I felt that the course was unfairly balanced for individuals who already had a lot of experience with Java.

I think a lot needs to be done in order to make CPSC 210 a better course, it has potential but throwing many students straight into a language in their 2nd ever computer sicnece course and telling them to basically learn it themselves is very unfair and caused a lot of imposter syndrome for many of us, especially BCS students.

No:)

Didn't go over lecture labs and poorly explained how to do them

- I think there could be more structure with how solutions are presented and discussed in class. I don't find that spending too long correcting other student's answers in class are a waste of time
- same with the way slides are presented emphasizing key points and things to be reminded of

## Please identify what you consider to be the strengths of this course.

#### Comments

Hands-on experience with lecture labs are very helpful. The project is also good at helping understand and apply concepts.

really useful and strengthen our coding and structure skill

No comments.

In-class practice work was a huge strength in this course.

Promotes self learning and independency.

The project is the biggest plus point for this course, it really helped solidify concepts I dont get during lectures and identify misunderstandings. I have to say the in class lectures were quite pointless though, I appreciate the idea behind it and instructors/TAs were also absolutely helpful during the sessions, but if in class lectures are just for practice, I would much rather practice alone without distractions and then ask questions during labs.

I liked having the pre lecture videos to reference and having in class lecture labs.

#### GOOD

The strengths of this course are how they allow exam retakes, the instructors seem to have students passing in their best interest, but maybe if it wasn't a requirement to pass the exams to pass the course then they wouldn't have to offer retakes.

The format of the course caters to a range a people with different computing levels.

TA's were very helpful, responsive and patient.

material

Good pace, material builds on in a way that makes a lot of sense.

#### Comments

#### useful course

- The many different learning opportunities and the amount of practice
- The exam-like review classes
- a lot of learning
- highly applicable concepts discussed
- self–guided project
- great communication
- –a lot of TA availability

Industry application of this course

The course is very informative, and has a lot of interactive components to get practice on the concepts learned. The course is also relatively well–organized, taking into account the sheer amount of information that the course contains. The labs and lecture labs are very helpful in getting comfortable with manipulating the concepts learned to use it on your own.

Very cool java learning process with systematic design focus. I like how we get to do the project and learn to focus on learning new things on our own, the labs were also helpful practice. It's also good for learning "how to learn" a new programming language which I have no prior experience with.

It does a good job starting from 0 experience so people who don't know how to code or know Java learn and not fall behind people with experience.

#### N/A

The culminating project was a really enjoyable experience for me and I felt very accomplished after completing it. I think its a great thing to have in the course so students can see just how much they have learnt in a short period of time.

The course is very well-structured which makes it easy to stay organized and on top of things once you understand how things work.

You learn a great deal of java and also get better at figuring things out on your own

the project is really helpful to apply the skills that I learned in the class.

- good overview of basic concepts
- lecture videos are helpful, but some weeks felt a bit overloaded (1h of prep videos vs. later on only a few minutes), I think the distribution of this could be improved

## Please provide suggestions on how this course might be improved.

#### Comments

it's good overall

I would still prefer this course not be flipped classroom, but if it must persist in this style, then I would like the lectures to contain more insightful comments and discussion from the instructors so that they can provide their experiences/expertise to the topics rather than the students learning from other student solutions, which doesn't provide any deeper understanding of the topic (e.g. potential best practices, what is seen on the job, etc).

Giving more notice for exams would be helpful.

Wordings are sometimes misleading even for TAs in office hours

My biggest problem with this course is how the exams are set up, specifically the prairie learn workspace for the coding questions. In both midterms I did really well on Part 1 but not so well in Part 2, and I feel this is not representative of my understanding of the material in this course. I think the issue was that we didn't use the PrairieLearn coding space a lot, only maybe once or twice before a midterm. Compared to other computer science classes where the coding environment where we learn is the same where we are tested. In this course we learn and do projects and lecture labs in IntelliJ but do exams on PrarieLearn which is not the same, especially since no one uses PrairieLearn in the industry to do work.

#### N/A

Just eliminate in class lectures, or make it such that it does not become only a "practice" session with background music. Lectures in CPSC 110 is a great example, i think, there

#### Comments

is a quiz and the prof clarifies misunderstandings from edX videos and goes more in depth, so it was rather useful. But it CPSC 210, in class lecture covers pretty much the same material (sometimes less) compared to the edx videos. and I cannot focus practicing on long–form problems in class anyway.

It's s as little strange to have all the design lectures at the end. I feel like I could have used those earlier on for my project. Also having us teach ourselves everything about the gui is a weird choice when it's such a huge percentage of our project grade. The requirements of the project phases should be more closely connected to course material. I felt like they were two separate things. I would have liked to apply the material I was learning in lectures and labs to my project.

#### GOOD

The lab checkstyle error message is horribly unintuitive as to how to resolve it. I am aware from various posts on ed discussion that there are several fixes, but it seems to also stem from multiple different problems, with no feedback on the autograder side as to where exactly the issue is. Sometimes the issue is fixed by resetting the environment and copy/pasting the code back in, redoing the spacing with the spacebar instead of tab, and other posts suggest checking method signatures and names. However, this does not always fix the issue and I am left with no idea why due to an incorrect and unhelpful error message. For the 4/9 labs that I have experienced this error, I have ended up wasting upwards of 5 hours per lab trying to resolve it, ultimately changing nothing/very little in my code before it decides to magically work at 2am with no indication of what the successful change was.

Get rid of the necessity to have an average of 50 across all exams.

#### Labs could be improved

Again, I think the project could have had more support in its design. Having TA's be able to work with students through their design and give some guidance towards HOW they should complete it, not necessarily the technical means of doing so.

Online format, the few classes that were online during the snow days were the ones that I felt most comfortable asking questions. The room's too large and everyone's spread out and it's hard to clarify any questions, I feel like a lot of students have similar questions and it would be useful to be able to ask these and have the prof answer to everyone.

Longer edx videos for the harder modules

Please fix PraireTest. My scores on the midterms were not an accurate representation due to PraireTest constantly buffering and lagging.

-more guidance on phase 3 of the project

More practice questions with new workspace

I particularly struggled near the beginning of the course due to the sheer amount of things we needed to read through. A more precise roadmap at the beginning of the course on which materials to read through first, and which tasks to complete first would be helpful.

The flipped classroom is really bad for my learning style. I learn all the things in prereading already and feel like the practice can be done at home since I can manage the materials on my own. The prereading format can have a better delivery too. Walls of texts are hard to digest at times though it's not too bad. The UML design diagrams and stuff were kinda weird and I feel like I didn't get enough chances to practice them before all the tests. Maybe more practice problems and earlier?

Even though git and github aren't really in the learning objectives of this course it would be nice to learn more about it other than just push and pull. Stuff like terminal commands for github and explaining branches/merges would be a nice add on to the course.

#### N/A

do manual grading for midterms

Honestly, I think the entire course needs a makeover. As mentioned before, if you really want to stick with the flipped classroom method then the actual explanations in class need to be MUCH clearer and honestly I would rather the lecturers go significantly in-detail to content that was "taught" with the online lectures. I'll be honest, I also barely learnt anything from the edx videos. I feel like I taught myself 90% of this course and I could have done that without paying \$600 to UBC. I apologize for coming off rude, but my frustration with the structure of this course and the lack of help from the instructors was really really frustrating and I'm hoping future students will not have to struggle like this. I understand many stuents did not find the course difficult, but I am personally aware that many students already have experience with Java and as a result, many of the concepts came much more naturally to them. In the future, I really recommend that:

A) Either different videos are used for pre–lecture content that goes more in–depth to the content and explains it clearer than it currently is. Or, the lecturers spend more time providing some more detail and answering questions about the content in–lecture.

#### Comments

- B) Lecture Labs are explained step-by-step in lecture rather than by students. While I understand we want student participation, I personally will not understand something explained by a student who is at the same level as I am. I NEED someone with experience and knowledge of how to explain difficult concepts discussing these things with me.
- C) More support with the 210 project, specifically the GUI. We were essentially thrown into learning Java Swing completely on our own and asked to use documentation that makes virtually no sense. It would have been nice if some other resources other than professional documentation could have been provided for the students to use and research more thoroughly through.

A little more explanation at the start of the course on the exact requirements and deadlines for assignments (ex. clarification on lecture tickets and emphasis on remembering to do them before the morning of every lecture).

The lecture's weren't very helpful and often required students to learn things on their own rather than through lectures

lecture labs are generally too short for 1h

# **Explanatory Note**

The reported metrics are as follows:

# 1. Percent Favourable Rating

This is the percentage of respondents who responded with a 4 or 5 (Agree or Strongly Agree) on a scale of 1 to 5.

# 2. Interpolated Median

The data collected for Student Experience of Instruction (SEI) are ordinal in nature, with a natural order (from 1 to 5). The usual measure of central tendency for ordinal data is the median (50% percentile). The Interpolated Median (IM) is an adjusted median that considers the number of responses less than the median, greater than the median and equal to the median. As such, IM reflects the distribution of students' responses.

Consider the following example:

### **Frequency Distribution**

Response for University Module Item	Section 1	Section 2
5 = Strongly agree	5	5
4 = Agree	3	5
3 = Neither agree nor disagree	6	0
2 = Disagree	1	2
1 = Strongly disagree	0	1
Mean	3.8	3.8
Median	4.0	4.0
Interpolated Median	3.7	4.2
Percent favourable rating	53%	77%

# 3. Dispersion Index

The dispersion Index is a measure of variability suitable for ordinal data (Rampichini, Grilli & Petrucci 2004). This dispersion index has values between zero and 1. A zero dispersion index indicates that all students in the section gave the same rating. An index value of 1.0 is obtained when the class splits evenly between the two extreme values (Strongly Disagree & Strongly Agree), a very rare occurrence. In SEI data at UBC, the index rarely exceeds 0.85, and mostly for evaluations not meeting the recommended minimum response rate.