

# 2022W2 UBC Individual Instructor Report for ECON 323 003 - Quantitative Economic Modelling with Data Science Applications (Philip Solimine)

Project Title: 2022W2 UBC Instructor SEI Surveys

Course Audience: **67**Responses Received: **18**Response Ratio: **27%** 

#### **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%

Creation Date: Friday, May 5, 2023

# hlua<sup>®</sup>

# **University Module Questions**

## **University Module Questions**

Question	Ν	n	SD	D	Ν	Α	SA	N/A	IM	DI
Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.	67	18	0	0	6	6	6	0	4.0	0.4
The instructor conducted this course in such a way that I was motivated to learn.	67	18	0	2	1	11	4	0	4.0	0.4
The instructor presented the course material in a way that I could understand.	67	18	1	1	2	9	5	0	4.1	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.	67	18	0	0	2	12	4	0	4.1	0.3
The instructor showed genuine interest in supporting my learning throughout this course.	67	18	0	1	3	6	8	0	4.3	0.5
Overall, I learned a great deal from this instructor.	67	18	0	0	1	9	8	0	4.4	0.3

Question	%Favourable
Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.	67%
The instructor conducted this course in such a way that I was motivated to learn.	83%
The instructor presented the course material in a way that I could understand.	78%
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.	89%
The instructor showed genuine interest in supporting my learning throughout this course.	78%
Overall, I learned a great deal from this instructor.	94%

# **Faculty Questions**

# Considering everything, how would you rate this course?

N	n	Very Poor	Poor	Neutral	Good	Very Good	IM	DI
67	18	0	0	2	10	6	4.2	0.3

%Favourable
89%

#### **Instructor Questions**

Question	Ν	n	SD	D	Ν	Α	SA	N/A	IM	DI
In classes where the size of the class and content of the course were appropriate, student participation in class was encouraged by the instructor.	67	18	0	1	2	9	5	1	4.1	0.4
High standards of achievement were set.	67	18	0	0	1	10	7	0	4.3	0.3
The instructor was generally well prepared for class.	67	18	0	0	2	7	9	0	4.5	0.3
The instructor was readily available to students outside of class (e.g., through email, office hours, or by appointment).	67	18	0	0	0	6	12	0	4.8	0.2
The instructor treated students with respect.	67	18	0	0	0	5	13	0	4.8	0.2

Question	%Favourable
In classes where the size of the class and content of the course were appropriate, student participation in class was encouraged by the instructor.	82%
High standards of achievement were set.	94%
The instructor was generally well prepared for class.	89%
The instructor was readily available to students outside of class (e.g., through email, office hours, or by appointment).	100%
The instructor treated students with respect.	100%

#### Open ended feedback

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

#### Comments

I would suggest using a mic during the lecture as it can be hard to hear you, especially when other students are talking as well. I would also suggest reading off the Jupyter notebook less and give us time to work on the exercises in class.

Discussing the solutions to the problem sets in class would be helpful.

The way that I learn, just talking about code on a projector screen isn't that useful.

It would be interesting to see at least a few examples worked from the ground up (i.e., given a problem and blank code cells, how can we reach a solution). This better simulates the problem set and exam questions rather than just executing pre-filled code cells.

Nope Philip is a great professor.

It would be better to explain more clearly what is expected for the second half of the course. The code chunks are huge and complicated. The emphasis and what will be tested on the final is not clear.

Teach how to do the project

no

Dr. Solimine is really brilliant and accommodating. He definitely knows what he is teaching, and truly cares about his students. One of the best instructors I have ever met. The only advice I have is the lecture could be more interactive. Sometimes, he just quickly reads through the notes and is a bit monotone.

The course felt a bit disorganized at times, especially after the midterm. We rushed through material very quickly and it was a bit overwhelming.

He was a great guy and really liked the instruction I just find it really hard to learn programming through watching a textbook presentation.

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

#### Comments

Great way to learn Python! But also a great way to learn some economics principles that are more in-depth than the basics from Econ 100/101!

The content

Problem sets are good practice

It's clear to learn some fundamental python skill

This was a fantastically structured course. I really loved the pedagogy – weighting the problem sets so highly really motivated me to learn by doing. I learn much better in this way compared to testing. The applications and packages used are fantastically useful, and I can see so many great applications of what I've learned. Thank you!

This is a very useful and practical course. Many jobs require data science and teaching students how to properly use those tools is very important.

Really nice opportunity to learn Python.

Gave an overview on a lot of skills and gave me more comfort in using python relating to economics.

Problem sets

Project was fun, and very practical in the industry.

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

#### Comments

Starting the final project earlier so students have more time to work on it that isn't during the week of finals

As mentioned above, some live examples in addition to the pre-filled Jupyter code cells might be beneficial (several of the CPSC courses take this approach where the professor will work through an example from start to finish with the students before giving us our own problems to work on individually).

Personally I also felt as though the latter half of the course was very rushed, which is a shame because the applications of python is what I was mode interested in learning (things like regression, classification, etc). But I understand that we need to take it slower with learning the python fundamentals in the first half.

I wonder if the university would ever consider splitting this into two courses – essentially an intro to python course in first semester, followed by a more in–depth applications of python course in second semester. Then again, maybe that's partly what the new ECON 408/409(?) aims to achieve.

No closed internet coding exams. Especially for an introductory coding course they don't really make sense. A take home 24 hour exam would have been better.

Releasing solutions for textbook exercises and problem sets are good for studying.

Do more presentation on how to do the project

The last section on regression was a little rushed, but I appreciate the introduction to a variety of techniques that I hadn't encountered before so I'm not sure I'd recommend dropping anything.

I think this course should require a higher level of prerequisite. I think at least some prerequisites like DSCI100, CPSC103, STAT201, etc should be added. I personally have taken or am currently taking CPSC103/107, DSCI100, STAT201, MATH152/307, which involves some knowledge about computer science, data science, and machine learning. But I still feel the second part of the course is overwhelming. The first half is too easy, the second half is too hard. The connection is not very tight, and this could be even more challenging for those who don't know data science and coding at all.

Provide practice exam(s) so we can know what kinds of questions to expect.

Not have this class open to comp sci students. It was frustrating because they know so much and I don't even know how to use a computer so it doesn't feel super fair on exams to be graded with them because clearly I will be worse. I have some experience in python but if I was completely new I would've been screwed.

Can spend maybe a little more time on the theory of more advanced mathematical and statistical concepts such as the Markov chains, optimization, and some of networks

# Please comment on any aspects, positive or negative, of your instructor's teaching, attitudes to students, class atmosphere, or any other matters affecting the quality of instruction that you consider worthy of note.

#### Comments

Would suggest trying to engage the class more, perhaps with in class activities using the exercises in the notebooks.

He was very knowledgable about the subject and always available to the students.

Professor was very professional in the way he presented the course and answered guestions, and knowledgeable about the material.

Philip is a great prof.

Supportive to students and responsive in the office hours

good

Really great teaching style, warm and accessible. Thanks!

This is a very useful and practical course. Many jobs require data science and teaching students how to properly use those tools is very important.

I can tell he is super knowledgeable and very interested in what he's teaching.

He was great. Was genuinely interested in helping me with the final project which I really appreciated. I was a bit demoralized by how open—ended the project was but he made me excited about it and more ready to take on a topic.

#### Please comment on any aspects, positive or negative, of the format and content of the course.

#### Comments

The material felt a bit rushed towards the end of the course.

No closed internet coding exams.

Maybe truncating some contents and slower down the course pacea and elaborate more on the applications/regression part

good

All material very releveant

I think this course should require a higher level of prerequisite. I think at least some prerequisites like DSCI100, CPSC103, STAT201, etc should be added. I personally have taken or am currently taking CPSC103/107, DSCI100, STAT201, MATH152/307, which involves some knowledge about computer science, data science, and machine learning. But I still feel the second part of the course is overwhelming. The first half is too easy, the second half is too hard. The connection is not very tight, and this could be even more challenging for those who don't know data science and coding at all.

A little boring in class wish attendence wasn't mandatory and lectures recorded.

Maybe spend a little less time on python and bumpy basics and more time on the actual data science topics and applications. Explain more of the theory rather than just coding it out.

# **Explanatory Note**

# Percent Favourable Rating

This is the percentage of respondents who rated the instructor a 4 or 5 (Agree or Strongly Agree).

## Interpolated Median

The data collected for Student Experience of Instruction (SEI) are ordinal in nature, with a natural order (from 1 to 5). While the mean may be used as a measure of central tendency for such data, it is not an appropriate or accurate representation of SEI data (cf. Stark & Freishtat, 2014). The usual measure of central tendency for ordinal data is the median. As a result, we have been reporting the mean and the median for the last several years. After considerable thought and data modeling, we now believe that the interpolated median is the best representation of the data, since it takes the frequency distribution into account.

Consider the following example from 2015W, the two course sections have identical mean (3.8). However, the instructor in section 2 received 77% favourable (4-5) ratings, compared to 53% for the instructor in section 1. The Interpolated median values of (3.7 and 4.2), much better reflects the distribution of the scores above and below their respective median. Furthermore, the interpolated median is better correlated with percent favourable rating; such that an interpolated median of 3.5 on a Likert scale of 1 to 5, corresponds to 50% favourable rating.

#### **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

#### **UBC Student Experience of Instruction**

Interpolated Median	3.7	4.2
Percent favourable rating	53%	77%

# 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 respondents in the section rated their experience of instruction the same. An index value of 1.0 is obtained when the respondents are split 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 minimum recommended response rate.