

# 2019W1 UBCO Individual Instructor Reports for COSC 150 001 - Physical Computing (Morgan Rauscher)

Project Title: 2019W1 UBCO Instructor Evaluations

Course Audience: **49** Responses Received: **23** Response Ratio: **46.94**%

#### **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: Expected n: Responded

#### **Frequency Distribution**

SD: Strongly Disagree D: Disagree N: Neutral A: Agree SA: Strongly Agree N/A: Not applicable

Statistics IM: Interpolated Median

Creation Date: Thursday, September 3, 2020



# **Summary of Results**

### **Course Questions**



#### **Instructor Questions**



# **Detailed Results**

#### For statistical purposes only, please indicate whether you are taking this course as



### **Course Questions**



Question	Ν	n	SD	D	Ν	А	SA	N/A	M	DI	Mean	STDEV
The textbook and/or assigned readings contributed strongly to this course.	49	23	3	1	3	0	1	15	2.50	0.70	2.38	1.41
I found the course content challenging.	49	23	3	6	6	6	2	0	2.92	0.66	2.91	1.20
I consider this course an important part of my academic experience.	49	23	2	0	3	10	8	0	4.15	0.56	3.96	1.15
I would rate this course as very good.	49	23	1	1	5	6	10	0	4.25	0.58	4.00	1.13

Question	%Favourable
The textbook and/or assigned readings contributed strongly to this course.	12.50%
I found the course content challenging.	34.78%
I consider this course an important part of my academic experience.	78.26%
I would rate this course as very good.	69.57%

### **Instructor Questions**

--- Mean Students were treated respectfully. 4.61 The instructor was available to students outside class. 4.26 The instructor responded effectively to students' questions. 4.43 The instructor demonstrated a broad knowledge of the s... 4 70 The instructor showed enthusiasm for the subject matter. 4.87 The instructor encouraged student participation in class. 4.61 The instructor set high expectations for students. 4.43 The instructor fostered my interest in the subject matter. 4.35 4.00 The instructor effectively communicated the course cont... The instructor used class time effectively. 3.61 Where appropriate, the instructor integrated research int... 4.26 The instructor provided effective feedback. 4.09 Given the size of the class, assignments and tests were... 4.35 The evaluation procedures were fair. 4.26 I would rate this instructor as very good. 4.26 **Total Score** 4.34 0.00 1.00 2.00 3.00 4.00 5.00

Question	Ν	n	SD	D	Ν	А	SA	N/A	IM	DI	Mean	STDEV
Students were treated respectfully.	49	23	0	0	1	7	15	0	4.73	0.27	4.61	0.58
The instructor was available to students outside class.	49	23	1	0	3	7	12	0	4.54	0.48	4.26	1.01
The instructor responded effectively to students' questions.	49	23	0	1	3	4	15	0	4.73	0.41	4.43	0.90
The instructor demonstrated a broad knowledge of the subject.	49	23	0	0	1	5	17	0	4.82	0.23	4.70	0.56
The instructor showed enthusiasm for the subject matter.	49	23	0	0	0	3	20	0	4.93	0.11	4.87	0.34
The instructor encouraged student participation in class.	49	23	0	0	1	7	15	0	4.73	0.27	4.61	0.58
The instructor set high expectations for students.	49	23	0	1	2	6	14	0	4.68	0.39	4.43	0.84
The instructor fostered my interest in the subject matter.	49	23	1	0	3	5	14	0	4.68	0.47	4.35	1.03
The instructor effectively communicated the course content.	49	23	1	2	4	5	11	0	4.40	0.62	4.00	1.21
The instructor used class time effectively.	49	23	2	3	4	7	7	0	3.86	0.70	3.61	1.31
Where appropriate, the instructor integrated research into the course material.	49	23	0	2	1	9	11	0	4.44	0.44	4.26	0.92
The instructor provided effective feedback.	49	23	1	2	2	7	11	0	4.43	0.57	4.09	1.16
Given the size of the class, assignments and tests were returned within a reasonable time.	49	23	0	0	2	11	10	0	4.36	0.33	4.35	0.65
The evaluation procedures were fair.	49	23	1	0	2	9	11	0	4.44	0.45	4.26	0.96
I would rate this instructor as very good.	49	23	1	0	4	5	13	0	4.62	0.50	4.26	1.05

Question	%Favourable
Students were treated respectfully.	95.65%
The instructor was available to students outside class.	82.61%
The instructor responded effectively to students' questions.	82.61%
The instructor demonstrated a broad knowledge of the subject.	95.65%
The instructor showed enthusiasm for the subject matter.	100.00%
The instructor encouraged student participation in class.	95.65%
The instructor set high expectations for students.	86.96%
The instructor fostered my interest in the subject matter.	82.61%
The instructor effectively communicated the course content.	69.57%
The instructor used class time effectively.	60.87%
Where appropriate, the instructor integrated research into the course material.	86.96%
The instructor provided effective feedback.	78.26%
Given the size of the class, assignments and tests were returned within a reasonable time.	91.30%
The evaluation procedures were fair.	86.96%
I would rate this instructor as very good.	78.26%

## **Open ended feedback**

#### What were the strengths of the course?

#### Comments

The main strength to this class is the instructor. Yes, the material is quite important, but it is also all available online, where as the instructor is present for every class and is willing to offer his perspective on any issue one might have.

This course was an enjoyable experience and provided the opportunity to understand computers to a greater extent.

The course content in this class is so much fun as well as versatile.

This course was also made amazing in big part because of Morgan Rauscher. He is the best professor I've ever had. His enthusiasm for the subject and for the students make for such a memorable experience.

helping me learn the various uses of Arduino

The professor is fantastic and the project was a great change of pace.

Many interesting insights.

gipped my attention in class.

Classes were short yet engaging. Rarely any homework which was excellent for my mental heath stress wise. Letting us have the freedom to build whatever we could think of essentially for our project was amazing. Great way to demonstrate the freedom that comes in the market of physical computing. Labs were also great. Very informative but never stressful.

The final project was pretty fun.

It throws you into the deep end and makes you do a lot of your own research to complete your project.

team work

It's a great starter for student interested in engineering to grab a general understanding of what it's all about.

Teaches basic real life applications of computer programming and integration with hardware.

The demonstrations and the labs

Morgan very much so knows this topic. It is very obvious that he can answer any questions, along with being able to guide students to other resources should they require something a little extra.

Prof has large amount of interest and commitment to the subjects he teaches. Definitely fostered my interest in the subject for sure.

The prof is really an intelligent person. He trusted the students to come up with their own projects and he gave his feedback consistency.

#### What were the weaknesses?

#### Comments

The only weakness i could come up with for this is that there are no wall plugs to charge my laptop during class.

Lectures were not very structured and it would be difficult to learn or understand the content without any previous knowledge of the course material. The labs were very easy and could be completed in about half an hour before labs.

It was quite fast-paced at times.

very few programming classes

The need for a somewhat meaningless written final. Though it is required for the science course to have a written final, I believe a lab exam would be more fitting.

Course was poorly structured.

I didn't like how only the group member who submitted a document could see the grade in Canvas.

Poor feedback on assignments. Grades were given without any comments.

I didn't like spending so much time on group updates during class.

I didn't like how we had to rate our group members so early on in the project.

very sparatic and doesnt follow a cliche way of teaching.

Classes were a bit too short sometimes. Felt like we were always pushing a few minutes after class ended. adding literally just 10 minutes more would probably help the prof.

I know it's an introductory course, but the content was moving by real slow. If there was an upper-level class for this, I would imagine that would be more fitting for the majority of the class as the class consisted of mainly 2nd-4th years.

It's a non-traditional course and very intimidating.

nothing

Actual content of the class was a little vague; maybe more slides/ documented info/ more files on canvas would help it. Also, the project was quite stressful, especially for people who can't get along with others quickly. I think some might prefer to work in pairs or alone.

Lectures was a waste in comparison with the labs. Labs helped a lot more than the lectures.

I guess a lack of structure sometimes?

I felt some of the class time was not used efficiently. That being said, I believe a majority of my feelings towards this were biased due to being an upper year student. Learning the basics of variables and basic logic functions feels inefficient but for a first year It may be different.

Prof isn't the strongest speller, not that it had any influence on the course material

Most of the class time was spent on Q/A from student. As a fourth year student in Computer science I found this very boring. It would've been beneficial if the prof spent more time talking about the subjects in the course.

### What did you most enjoy about it?

#### Comments

The funnest part of the class was the project that everybody had to do.

The professor was very enthusiastic about the course material and encouraged my commitment to the course project and has helped me to become more interested in working with computers and Arduino's in the future.

My favorite part about this course was that the professor showed me that I was capable of more than I thought.

Making various stuff with Arduino

The project was fantastic and seeing others' progress was also great.

I enjoyed working on the final project, although my group was not that helpful.

I loved building our project the most. It was great focus for the course and way to demonstrate what working in the physical computing industry.

We got to play with electronics :)

Morgan's attitude for the subject matter was infectious.

working together with people

I loved the lab section - I would probably never brought myself to play with Arduino kit if not for this course.

The process of building my own project.

Actually building projects

I loved Morgan's enthusiasm in the class. He showed a great deal of knowledge along with further resources. He encouraged us to challenge ourselves within the field. I would definitely take a class with Morgan again. Without him I don't believe the course would be the same. The "Business" groups were a unique way to get us to think about industry and physical computing on a greater scale.

Having a term project and working in a group, was fun to have all that time to perfect a project that we wanted to do and nobody made us do it, complete freedom

The project that he assigned it to us was very enjoyable and challenging at the same time

# **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 Evaluations of Teaching (SEoT) 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 SEoT 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 classes have identical mean (3.8). However, the instructor in class 2 received 77% favourable (4-5) ratings, compared to 53% for the instructor in class 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.

Response for UMI	Class 1	Class 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%	

#### Frequency Distribution

## **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 to the instructor. 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 SEoT data at UBC, the index rarely exceeds 0.85, and mostly for evaluations not meeting the minimum recommended response rate.