

2022W1 UBCO Individual Instructor Report for COSC 301 101 - Introduction to Data Analytics (Firas Moosvi)

Project Title: 2022W1 UBCO Instructor SEI Surveys

Course Audience: **145** Responses Received: **61** Response Ratio: **42%**

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: Tuesday, January 10, 2023



Detailed Results

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



University Module Questions



| | Ν | n | SD | D | Ν | А | SA | IM | DI |
|--|-----|----|----|----|---|----|----|-----|-----|
| Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn. | 145 | 60 | 1 | 6 | 6 | 26 | 21 | 4.2 | 0.5 |
| The instructor conducted this course in such a way that I was motivated to learn. | 145 | 61 | 4 | 9 | 9 | 22 | 17 | 3.9 | 0.7 |
| The instructor presented the course material in a way that I could understand. | 145 | 61 | 2 | 10 | 9 | 26 | 14 | 3.9 | 0.6 |
| 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. | 145 | 61 | 5 | 5 | 8 | 21 | 22 | 4.1 | 0.7 |
| The instructor showed genuine interest in supporting my learning throughout this course. | 145 | 61 | 0 | 4 | 8 | 25 | 24 | 4.2 | 0.5 |
| Overall, I learned a great deal from this instructor. | 145 | 61 | 3 | 8 | 7 | 27 | 16 | 4.0 | 0.6 |

| Question | %Favourable |
|--|-------------|
| Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn. | 78% |
| The instructor conducted this course in such a way that I was motivated to learn. | 64% |
| The instructor presented the course material in a way that I could understand. | 66% |
| 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. | 70% |
| The instructor showed genuine interest in supporting my learning throughout this course. | 80% |
| Overall, I learned a great deal from this instructor. | 70% |

Open ended feedback

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

Comments

The instructor could have provided better feedback on labs and projects.

No. Other than a few course content changes that I have mentioned below, the instructor is very professional and his way of teaching was very conducive to my learning.

Even though the course was structured well and I learned a lot from this course, there was a huge amount of workload in this course. I felt like it took too much of time, maybe doing labs in class and letting us apply it to the project would be a great way of utilizing student time.

- Less out-of-class videos. Was given a lot of videos to watch out of class.

- Asking more questions based on what was taught. We were taught very basics but were expected to do a lot of learning on our own time.

We always end up learning material after the lab related to that material is due. It takes hours to complete the labs sometimes because we haven't learnt it properly and we are required to google everything. It is really time consuming and tough to self-learn code

Utilize Canvas more instead of the external websites and programs. Understanding everything was pretty overwhelming.

Faster feedback about assignments and labs through one method of communication. Having feedback be through multiple media is a tad bothersome as I am never sure when I get feedback because there isn't always notifications as to where it is

He could've made the work a little more clearly defined, the labs felt quite difficult most of the semester

Provided information on how to use the Tableau software.

Self teaching was greatly encouraged in this course, which worked very well most of the time, but the rare occasions that it worked poorly caused lots of issues and left many students frustrated. I wish more class time was spent going through examples or even just going through the first step of a new task. (eg. A class showing us how to create a Tableau dashboard, rather than a pre-recorded video to watch at home)

I would not label this course as "no previous experience in Python needed" because I felt absolutely lost during the tests and labs where we created functions and loops and other Python things that I still don't know how to do. I had no Python background and the learning curve was incredibly steep.

- explain tableau better

Giving practice questions or tasks for students to do.

I wish the layout of the course was slightly different sometimes we were doing labs after milestones and I wish it could have been the other way around as it would have given me the opportunity to ask my TA questions and then apply my newly learned concepts into the milestones. It did make the labs easier but I still didn't love the layout.

Labs and classes seemed disjointed. Would be better if they were synced in the same week.

Could have scheduled some assignments better to allow for a smoother course flow. (Ex. A lab that would teach us how to do a certain part of the project was due AFTER the certain part of the project was due.)

Gradescope is hard to find feedback from since Labs/Projects are marked as 0/0. With no way to show verbal feedback on a glance without clicking each Lab.

There were too many submission, the instructor can maybe ease up in between weeks.

Overall, there is nothing much for me to add when it comes to how Dr. Moosvi could improve on or done differently as I enjoyed this course and found that I had a lot of support in terms of my learning.

Fix all the typos in the lab, remove Tableau, and remove Excel.

Rewrite the instructions for all assignments and milestone for more clear instructions because all the assignments instruction skip a lot of steps, so students don't understand what to do.

More examples in class and 'quiz' questions (e.g., some of the slides looked like they had 'quiz' questions but we often skipped over them). The lecture on EDA and visualizations was really great for this and one of the most memorable and engaging lectures, in my opinion.

Not much really. I feel this was the best course in terms of how it was handled since it made it harder for us to fail

In my opinion, some more complicated topics were not covered in enough depth.

Less learning logs as they created lots of stress during the busy semester.

Having the bonus test during class I feel takes away slightly from the learning that could happen in the class. It's my opinion but maybe the bonus test could be online at a certain time then that extra class time could be spent going over some of the different

coding skills that we need to learn. Possibly going over building and working with functions.

This course was honestly the messiest courses I've taken at UBCO. The professor tried too hard to be the flashy, innovative professor when it comes to education, and ended up making a disorganized, confusing, and unenjoyable course all in all.

Providing sample tests or practice papers for our own review for what was covered in the course would be really helpful in my learning.

Would be nice to have seen example problems solved in class. I personally was not able to find a good YouTube video explaining everything about functions.

More dedicated lectures, would have helped me learn a lot more. I feel most content was offloaded to videos, assignments and tests. Firas Moosvi is a great professor and his heart is in the right place, but most lectures felt like the content in the slides was being summarized and skimmed over. I wanted to hear more about how data analytics is used in the real world, and how it applies to his own research. Further insight when going over the slides and using anecdotes would be a great way to deliver the content more effectively.

Posting the complete answers to the assignments is the single greatest thing a professor can do for me. I shouldn't have to attend labs and get direct feedback to know what I did wrong. I value my freedom and independence to recover from mistakes in my own way. I would prefer assignments be graded on solely a point scale. It is easier to understand, and does not over complicate things.

Talking about the labs more in class.

- not using so many different software suites

- should be organized in every lecture/test
- labs that are intended to teach project concepts should occur BEFORE that phase of the project
- inconsistency in where to find resources made the course more difficult

- course should be taught from a CS perspective, not a data science perspective. I care about wrangling data, not presenting data

More clear directions on Milestones, the labs were very clear however I consistently was confused throughout the project.

- word the instructions to all the assignments better: the instructions were so vague and confusing, it was highly difficult to understand what was being asked of us to do.

– not assume that everybody is a computer science major: it hampered my learning as I was completely clueless on literally everything that was being taught, especially the regular use of jargons, and every assignment that I did felt like a huge task that I needed to get out of my way.

- I was very excited to learn coding and more about data analytics, but I think I am never going to take any computer science courses ever again.

Teaching programming is difficult as I believe the best way to learn is by trying on your own. The instructor did well in guiding the class through labs and lectures to learn new material and provide the push to try it on our own.

There is nothing that I could say for Dr. Moosvi to do a better job, he has gone above and beyond for his students.

The instructor could have made expectations for things like Labs and Milestones clearer. A lot of times, the Milestones or Labs were of extremely high or extremely low difficulty, causing their prioritization very difficult. The reasoning behind this steep curve was not clear. The structure of classes was also not very clear, as the difficulty and content shifted without much of a pattern.

While the introduction to python and file systems and how to move around windows on your PC is great for beginner users. This is nevertheless a third year course. For the first dozen classes, I felt as if we were being taught first year knowledge. When the instructor finally got into pandas and seaborn, he taught us some basic functions, but didn't explain too much on why we would want to use those functions in the first place. For example, for a demo that he did during class using data from WWII plane bullet holes, he showed us how to go through the data using pandas but for most of the demo, he just walked us through the steps for that specific problem. He didn't explain in too great of detail why and in what other scenarios one would want to use the functions.

Nothing I can think of.

The excessive use of external tools is annoying, sometimes one goes down and I can't view anything, it also requires me to almost always use my laptop as some of the tools don't seem to work well on my phone or tablet. As well the grading system makes no sense, I don't really know where I stand in this class and what I'll be getting as a final grade.

Professor Firas Moosvi needs to use an actual grading system. This instructor instead grades everything using 4 letters, I, R, G, and E, which equate to about 0%, <50%, 85%, and 100% respectively. This suggests that you can either fail or do extremely well with no in–between. It is unfair to invent your own grading system without also providing access to the one used by every other course offered at UBC.

I think that canvas is great because it consolidates all of the labs, assignments, and lecture notes into one place. I feel like the course was too spread out over too many third party sites. This contributed to me to completely missing dates and deadlines as this is the one and only course that I have ever taken at ubc to be laid out in such a disorganized way.

I would have preferred to have a number/percentage grade on labs to understand better the weight of my mistakes or weight of the learning done in those labs.

Include more practice problems/examples that related to labs. Other than that i have no other suggestions

I wish there was less self learning from watching videos, because then coming to class seemed to be not as useful.

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

Comments

Flexible deadlines, well-organized course material, different lecture formats (live lectures and Zoom lectures).

Well documented instructions

lots of information available on the Internet an instructor that is eager to teach favourable grading policies helpful TAs

Learn relevant skills

Very helpful course for people in data science or analytics

Understanding how to manipulate datasets through python and other tools.

Explanations of data analysis and being an intro into this world of knowledge

This class is undeniably one of the most useful classes I have taken at UBC. I appreciate that, although extremely challenging at times, the hands–on material were what made me learn coding. I think it is fair to say that the course is set up in a way that you learn the content to prepare you to use it in the future. It is not a notes taking, memorization course that you will forget the content the minute you leave the exam. This is, in my opinion, the biggest strength of the course. I think the the support we get from the TAs was also very helpful.

It teaches Python quite well and is a great introduction to data processing

There are alot of resources available in the course to practice and improve.

Open book assessments with tough questions, flexible deadlines, resubmission policy, general teaching method.

There is a lot of cool content here to learn about, and I was thoroughly interested in what we were doing throughout the course.

- mostly online

- lots of practice

effective labs

Exposure to python and data analysis tools.

the flexibility and the options for support

Good intro to Compsci as friendly and decently paced. Learned a comfortable amount

Teaches a great foundation of Data Analysis in Python (A strong and commonly used language), Pandas, Seaborn, Tableau and some Excel.

Helped with learning Python Programming and using different IDEs.

instructions for everything

Overall, one of the biggest strengths of this course is that everyone who takes this course and puts in the needed effort is going to have a relatively simple time when trying to succeed. Being that this is a computer science course, I imagine that there are a lot of people who look at this course and think that its going to really difficult and that you need to have taken computer science in university up until this point, but that is not the case whatsoever. Everyone who takes this course is going to be given the proper chance to succeed provided that they put in the required effort to succeed.

We get to learn seaborn which is really helpful.

This course is fun and it includes the basics of python.

A good introduction to Python and data analytics/visualizations using Python (including Pandas and Seaborn). The professor was willing to help with troubleshooting and was available for extra help (after class and online via Ed Discussion).

the assignment deadlines, the ta hours, the ed discussion

Can learn basic programming languages in one semester.

This course is great for people who may be new to the topic, the fundamentals are covered very well.

the slow introductions into python really helped with my learning

Focused mainly on the practical application of data analysis and python. It puts you in a real world situation where you get a data set and you're given real world questions on what you can understand from the data. I can see exactly where all of these skills will apply to obtaining a career in data science will be.

Tableau is cool.

The course cover python and data analysis techniques which i found it interesting and important.

UBCO Student Experience of Instruction

Comments

Instructor was able to direct students towards what they should learn. Instructor provided nice presentations in class.

Gradescope was an effective tool to use as I could directly commit my assignments to git and submit by sharing my github repo. Gradescope is the only extra tech in this course I would advocate for its adoption. The extra 48 hr deadline is genius, though assignments could just be extended and I wouldn't know the difference. Firas is very respectful and has a kind policy when it comes to deadline extensions. The project was genuinely fun and I learned a lot doing my data analysis, I appreciated the freedom to pick our own datasets.

Lots of experience in using different data and computer science related programs.

It's beginner friendly and python with pandas is a useful language

Being able to analyze data effectively and efficiently is incredibly important, and I definitely learned that.

Lots of different data analytic softwares taught that gave a variety of ideas and ways in which data can be presented.

The wide array of topics covered gives students a good starting point to continue to develop skills in all of the areas covered.

How open the course is to people that have never taken any computer science courses, and how supportive the Tasks and prof are.

The course showcases the basics of Data Analysis well

Great format. Very forgiving whilst teaching a lot.

It helps teaching analysis to a variety of degrees.

It is easy to understand material, the class is enjoyable to attend lecture.

Beginner friendly, professor is very welcoming and entertaining to questions, etc

The structure of the course is very accessible, you can come to class or watch lecture recordings. Getting help is also very accessible as well with ed discussion

Please provide suggestions on how this course might be improved.

Comments

Better feedback on assignments and projects.

I feel that the labs, course content and project milestones were somewhat mistimed. I understand this is to encourage self learning, but it was hectic trying to understand something completely new to me such as Tableau on my own and it was only covered in class a day before the deadline.

Reduce courseload

Use class time for labs and not dig very deep into the advantages

- Make bonus quizzes out of class and maybe increase the weightage of quizzes considering the amount of time used.

Giving more examples and a clearer expectation for what is required on the group project. Often times felt lost and confused on what expectations are.

Have more emphasis on learning through labs or classwork with less labs overall. Having a lab due every week can be overloading when I have assignments due for other classes

I believe the instructor should focus more on lectures — I felt that throughout the course I only learned the content doing the labs, projects and tests. It was a lot of hands on trial and error, which although resonates with how coding works, can be frustrating as well, especially when you compare the level of difficulty from the concepts taught in lectures and included in the Canvas lecture notes to the one asked in tests and labs. I felt that this contributed to a lot of stress, especially since I didn't know how to really prepare for the tests

The homework could have been better explained and defined, I found many of our assignments overly long and not very well defined.

Lecture notes more relevant to tests and labs.

Certain project/lab deadlines coincided and made a really large workload, and some of these occurred before the material was thoroughly taught in class. I wish deadlines would have been adjusted accordingly/material was taught in a different order.

There is way too much work for this class. The weekly labs are super difficult if you don't have any coding background, which I don't, plus learning how to work for the group project, plus the tests, plus the videos we're supposed to watch before class. I feel like I never stopped doing work for this course and if I thought I could take a day or two break, then suddenly I was behind. I appreciate that we're given bonus tests and we're allowed to resubmit the labs for the grades we want, but that creates even more work. This course has definitely caused me the most stress of all my courses (and I'm taking cell physiology and neurobiology) because of all the work required. I think lab assignments should be every other week or don't have tests, or less tests, or any combination of that.

- have the lab that teaches the skill prior to using it on a project / test

Make the project smaller and maybe have two mini projects.

the layout of the course.

N/A

Plan the project with lecture stuff carefully, the project this course is much faster than the labs than the lecture really teaches that part.

Figuring out a better way to make Gradescope less cluttered.

reduce weekly logs and labs

Overall, there is not much for me to suggest on how this course may be improved upon.

Improve on using a better software application for graphing, don't use Tableau again.

Separate COSC majors and non–COSC students. This class had a broad range of past experience and computer knowledge which made it feel like the course was never at the right pace — too fast for some and too slow for others. I imagine it is hard to teach a course with such diverse student abilities and backgrounds. Since DATA 301 is an equivalent course, why not make one for COSC students and one for non–COSC students? I think this would benefit the students, the professor, and the course in general.

I think having more structure in the lab sessions would be useful as well. I previously took a course with a lab where we used R for data analysis and the lab started with an introduction to the data, some functions/packages/methods/etc. that we would use, and an overview of the goal of the assignment — I think something like this would be beneficial for this course's lab. It often felt like the TA was running around and answering the same question multiple times for multiple students and having it more structured and cohesive would avoid this extra stress and increase efficiency.

Less time spent on Git/GitHub. I found this first section of the course to be a bit unnecessary since only a few commands were actually used for the group project (e.g., pull, add, commit, and push). I don't think the extra time spent on branches and more detailed GitHub information was useful for the course or for data analytics in general. While I understand it is a good tool to have and know how to use, it doesn't seem to fit well in a course about data analytics and might be better saved for a class for COSC majors who may be more likely to use Git in the future. I think a more simple lesson on the commands that are used during the project and for labs would be beneficial and allow for more time to be spent on other course content.

I'm not sure who controls this but based on the course structure and my experience, I think more TAs would certainly be beneficial (e.g., for marking, extra help/office hours, etc.).

maybe just online streaming

Even though this is an intro course I feel that more advanced material could be covered.

Lecture could focus more on seaborn

Referring to earlier, the only thing I would change is having more time from the professor to be going over coding and building functions and not having the bonus tests during class. Other than that, everything is great.

Just start from scratch for next semester. Everything, the labs, the course structure, the tests. Especially the tests, I get that the idea was to put us in a real coding environment where we're able to search on the internet and our notes to help as we go, but you got to understand students' psychology. Have us actually have to learn the syntax of pandas, rather than asking us a questions of "what error will this bring" and we can just try the code out in our own jupyter notebook. When I have so many other courses to focus on, the opportunity to do the absolute least and still get a high 90 in this course is not how I learn here.

I would suggest that he would provide with better or clear instructions in lab work so that we can understand things better when working on our lab as well as extent the office hour after class or have a personal office hours so that students have more time to interact with him to clarify doubts.

I wish the instructor actually taught something in this course and not leaving everything to the student to learn on their own time. Learning everything on my own made this course very difficult and stressful.

I would strongly recommend that this course cuts backs on the frequency of assignments and tests in favor of traditional lecturing. For example the weekly reading logs in my opinion are completely unnecessary. Being asked to explain what I learned every week and having to write a paragraph on the grade I deserve was not an effective part of this course. The reading log assignments offered nothing new in terms of content or experience, and took time away which I could have spent on other course work that actively contributes to my learning. Even if they are free marks, students are capable of self reflection on their own.

Lectures themselves were usually shortened and only a handful of slides were dedicated to data analysis theory. More often than not, we were told to watch previously recorded lectures or public videos to instruct ourselves in detail while the majority of content was skimmed over in. I understand that it can be difficult to teach technology, but having at least a live demo on tableau or having multiple in depth lectures on excel would have been very much appreciated.

In the case of tableau and EDA we were expected to complete the project milestone before these were even taught in lecture. The timeline should be shifted so this does not happen.

While smaller tests with makeups can be better than midterms in theory, I ended up taking 7 tests in total as the alternative. This was 8 dedicated test classes that I could have been learning from the professor who's verbal instruction and guidance is much more valuable. These tests were also relatively difficult and were not marked in a reasonable amount of time, so it was hard to actively learn from my mistakes. The exams themselves were of substantial length, taking me an hour to an hour and a half to complete. This made them feel almost indistinguishable from full length midterms which are stressful by nature. Having fewer tests or 2 basic midterms would be much better in my opinion. Even shortening the test lengths, would be a huge improvement.

It was frustrating on the multiple occasions when I had a project milestone, assignment, reading log and test due in a single week. These expectations are unreasonable compared to my other courses where I exclusively had higher quality assignments that were the same length due almost bi–weekly. The amount of work itself is not an issue, but when part of the work is nonconstructive (reading logs) and dedicated lectures are few and far between it is difficult to justify the effort.

Test are also poor evaluators of programming proficiency, and the questions and answer could be vague. For example a large portion of mc answers were "none of the above" which can be misleading especially when code may or may not run outside of context. Assignments usually asked us to use built in panda/sns methods in a very specific way which again is not indicative of real programming and it could also be very vague on what was asked. This is generally expected but it becomes more frustrating when I dedicate a large amount of time on these.

If we are going to use ed tech provided by other companies, it is respectful to use an opt-in policy not an opt-out policy when it comes to data. I value my privacy, especially when this course could easily have been delivered without using these external technologies. Ed discussion could have been replaced with the discussion section in canvas, and prairie learn could be replaced by canvas quizzes with the same effect.

Lastly I strongly considered the project be made individual if the majority of deliverables are individual as well, the point of the group is to share the workload. In my case, I finished my work early and had to wait for my other group members to finish their individual portions to submit very close to the deadline.

Focus on what CS students need. Aggregating data and optimization. Fewer charts

The professor had mentioned it in the most recent learning log, however teaching more tableau and less python/pandas/seaborn would make the course much more accessible.

Break it down so that people from different majors can understand what is even going on in the course – after all, it is shown in SSC that this is an introductory course that everybody will be able to take as an elective and not be stressed about.

I think the general course structure was streamlined pretty well. It just took a few weeks at the beginning of the semester to figure out the routines and processes involved with lab submissions and downloading/setting up all the necessary programs.

Milestone 3 for the project was a large amount of work compared to the other milestones. I don't think the professor stressed this enough and the class in general was caught off guard. Perhaps breaking the Milestone 3 requirements up by adding some of the deliverables to Milestones 2, 4, and 5 would help students manage their workload better.

For students taking this course as an elective, it is a considerable amount of work. The course material itself is not overly challenging, but it does require a significant amount of time.

The course needs prior knowledge of Python, Terminal, etc. and should mention that in the pre-requisites, or should be taught in a way to accommodate new learners too. A lot of my peers struggled quite a bit due to the randomness of difficulty and vagueness in expectation. The grading systems relies on a unique letter system, consisting of just 4 levels, making it very hard to understand where exactly a student needs to improve. Comments alone as feedback don't highlight how severe the mistake was, making it hard to understand if there's gaps in someone's knowledge. I believe a course like this is very useful, but it can use some restructuring where the students are eased into programming more, and are not expected to use the terminal before it's even introduced in class.

some of the lab task are outdated or aren't adaptable to current versions of software.

Please for the love of all that is holy make it more easily accessible for degrees with no background in coding.

Professor Firas Moosvi needs to use an actual grading system. This instructor instead grades everything using 4 letters, I, R, G, and E, which equate to about 0%, <50%, 85%, and 100% respectively. This suggests that you can either fail or do extremely well with no in–between. It is unfair to invent your own grading system without also providing access to the one used by every other course offered at UBC.

I think more information given in the course and less self learning would be beneficial. When I pay what I have to pay for a course, I would like to be taught by the professor and not linked to a stack exchange forum that doesn't really help my learning. I feel as though what I should be learning should be coming from the actual course content. Some self learning is good, but this course takes it too far.

I would have liked a better lab/leture schedule to the milestones. It felt like lab was always after a project step was done and the lecture was the week of the due date creating extra stress.

None

Generally, I think the in person lecture should deliver what we need to know to do labs and project, instead of having many self learn materials. Also some labs were structured in a way that I wished I know before doing projects and tests.

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.

| 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% | | | |

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 respondents in the section rated their experience of instruction the same. An index value of 1.0 is obtained when 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 surveys not meeting the minimum recommended response rate.

UBCO Student Experience of Instruction