

2022W2 UBCO Individual Instructor Report for DATA 301 101 - Introduction to Data Analytics (Firas Moosvi)

Project Title: 2022W2 UBCO Instructor SEI Surveys

Course Audience: **170** Responses Received: **40** Response Ratio: **24%**

Report Comments

Recommended Minimum Response Rates

Class Size	Recommended Minimum Response Rates based on 80% confidence & \pm 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

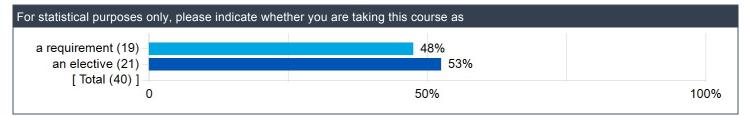
Statistics IM: Interpolated Median

Creation Date: Monday, May 8, 2023

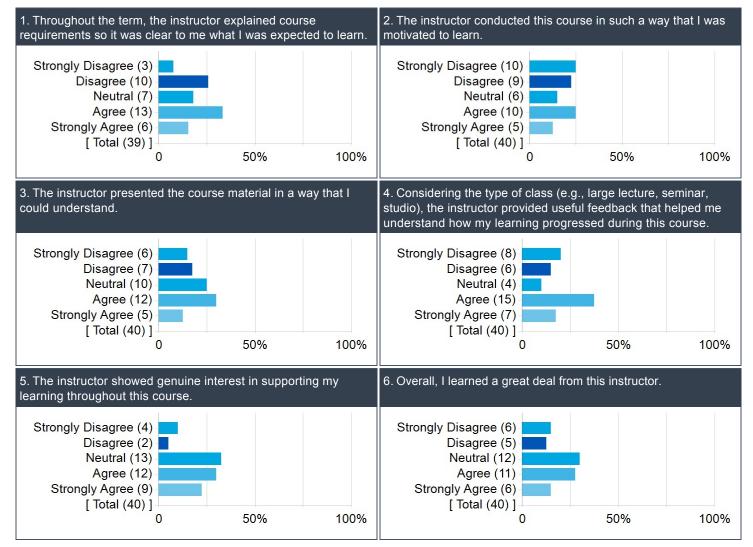


Detailed Results

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



University Module Questions



	Ν	n	SD	D	Ν	А	SA	M	DI
Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.	170	39	3	10	7	13	6	3.4	0.7
The instructor conducted this course in such a way that I was motivated to learn.	170	40	10	9	6	10	5	2.7	0.8
The instructor presented the course material in a way that I could understand.	170	40	6	7	10	12	5	3.2	0.7
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.	170	40	8	6	4	15	7	3.6	0.8
The instructor showed genuine interest in supporting my learning throughout this course.	170	40	4	2	13	12	9	3.6	0.6
Overall, I learned a great deal from this instructor.	170	40	6	5	12	11	6	3.3	0.7

Question	%Favourable
Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.	49%
The instructor conducted this course in such a way that I was motivated to learn.	38%
The instructor presented the course material in a way that I could understand.	43%
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.	55%
The instructor showed genuine interest in supporting my learning throughout this course.	53%
Overall, I learned a great deal from this instructor.	43%

Open ended feedback

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

Comments

Most of the lab material and some of the test material weren't included in Firas' lectures. We were expected to teach ourselves most of the course. The TAs were also not helpful, so I would suggest being more careful with who he chooses as TAs.

I think he should review the course load his courses have. I have taken 3 courses with him counting this one aswell. The course load is immense.

No suggestions

We could benefit from clear rubrics detailing from what specifically you want from data visualizations. Otherwise, we often need to spend lots of unnecessary time recreating a pixel-perfect replication of the screenshot or get marked down for something minor

Actually answered questions on his third party discussion platform

Not made group projects so confusing

Reduced the work load greatly

resigned at the start of the year so another prof could teach

Teach the material and construct the tests and labs based on that material. Making us learn different material just to do the labs is just confusing as to what is actually required.

I think teaching the content more thoroughly would be helpful. Dr. Moosvi touched on topics however usually did not go into detail, hence for the weekly labs, students often had to spend hours and hours learning the content first before they could complete the lab assignments. Also, although sometimes tests and milestones were marked on time, often they weren't (for weeks); I wish these were always marked quickly (~within a week) so that we knew where to improve before going into the bonus tests/into the next milestone, etc.

I feel like classes could have been more productive. More often than not, what I was required to do in labs and projects was not properly taught in class and I had to search for it myself. It made the process really frustrating.

Work on disparity between tests, labs and content taught in class.

I hope the grading speed could be quicker, and some components are really unnecessary. Also, something can be presented on feedback or the course outline, so it would not spend a lot of time for students to ask for TA

- Get rid of the bureaucracy of the course.
- Make the project start after withdrawal deadlines, get rid of the weekly system.
- Stop the meddling with individual projects after the initial approval.
- Get rid of the E, G, I grading system and replace it with a conventional grading system OR actually regrade on time.
- Get rid of learning logs OR put them inside the lab itself.

- Get rid of the ed discussion query systems and have the TAs answer it during lab time. The current system seems to make it

extremely difficult for the professor or TAs to find urgent matters in the sea of simple (and often easily google–able) tech FAQs. – Drop the mandatory check ins for grades OR be more available.

- Do not change the questions of the quiz after the fact and instead award points caused by the incorrect wording on the question.

I think the labs consistently being ahead of what we were learning in lecture (sometimes tests as well). Shifting this would make the learning process much easier to digest.

Unorganized, I think the biggest issue that most students had was that the things that were taught during the lectures did not match the assignments. Many times on an assignment or lab it asked questions that were never covered in class and had to be figured out on our own.

I would recommend that Professor Moosvi adjust certain aspects of his teaching practices to better serve the needs of his students. Specifically, I suggest that he arrive punctually to his lectures, as a delay of five minutes before each session can be detrimental to students' learning experiences. Additionally, I suggest that he use his designated forum page more effectively, as students may be waiting for lengthy periods for responses to their queries. I, for instance, have been waiting 2 months for a query only he can answer. Moreover, I recommend that he manually grade his tests, and align his assessment materials more closely with the content taught in class. While open–book tests and labs are permissible, it is important that the topics chosen for assessment are relevant to the overarching themes of the course. Finally, I suggest that Professor Moosvi post the lecture slides utilized in class to enhance the quality of his instruction and minimize his reliance on course materials created years ago.

Maybe this course needs to separate between non com sci students and com sci students, so the learning path could be more similar in the class.

It seemed that classes mostly focused on the basics and then labs required more advanced, new functions which I really struggled

Comments

with even when I understood the basics taught in class. It would have been helpful to learn less content but spend more time the topics. Another suggestion would be to make the labs either easier or shorter. This course was said to require no computer experience so as I have a little bit of experience I was not expecting to struggle as much as I did with each lab. Although the extensions and the support were helpful, having to rely on them so much left me feeling a bit behind and overwhelmed, stressing about if I could even pass the course going into an exam with a time limit and just feeling like I didn't know enough on my own. It may have been more understandable and helpful for learning if the labs used mostly information learned in class and then added some challenging aspects, but just not as many new functions to use and unfamiliar tasks as every lab assignment had.

I guess in terms of content during lectures and labs and tests, the content taught in lectures was pretty slow meaning sometimes the labs had content that wasn't taught yet and for some people who haven't taken data/cosc courses before, it was hard for them to complete the lab.

Demonstrating more enthusiasm and passion for the subject matter. Also, being more organized and reliable in planning and executing lessons.

Remove the project portion of the class, or make it not as heavy as a requiring passing it to pass the class. It adds a lot of stress and work to the class, and is too much in its current state.

Please teach more in-depth topics during lectures. they do not prepare us enough for the labs.

Would it be possible to have more interactive and engaging instruction in addition to the online materials provided? I believe this would enhance our learning experience and allow for a better understanding and retention of the material

The grading is a little slow

Make the project grading be done individually and not by the group because I put in so much effort and my group members did not.

The way Dr.Moosvi teaches is unique and I believe his radical perspectives on teaching are beneficial however they do not align well with our current education model. Contract grading in theory is a great idea however it does not translate into the grades we actually get with a +/– 15% range for each "grade". He did not teach the content we were assed or tested on in labs or unit test. We were consistently behind and I feel I would have learned the same amount not attending lecutre as I would have if I did attend lecture. The labs and tests almost never contained content we were taught in lecture and almost everyone needed a retest. Lab TAs were unhelpful providing feedback weeks after an assignment was already handed in. The way he set up the project feedback sessions was terrible, often I would sit there for hours only for the TA to tell me sorry I dont know or not even get back to me at all. His time management and organization was the downfall of this course.

I wish he explained more about project student hours on the course website; I didn't realize they were a separate Zoom system at first. (Admittedly, that's my fault for not checking Zoom.)

despite the negative comments some other students might have, it is important to highlight that bonus tests and resubmissions are BONUS. Some students think that it is their right to always have them. I think the current limit of 2 resubmissions per week is good already. Regarding the tests, unlike the negative comments that some other students might have, I did not find how having a test graded before taking a bonus test is important. Again, I think that in the future, it is important to emphasize that bonus tests and resubmissions are BONUS. It is there for students if they want, but students should not think it is their fundamental right.

Also, being more energetic will also help the class to be more fun :)

Maybe the number of project feedback sessions can be increased.

Make lectures easier to follow, more relevant to the work in the course, and teach the skills needed for the labs and the project.

Less communication channels would be nice. It's kinda hard to keep up with ed and prarie, i always think i'm forgetting something

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

Comments It provides a broad introduction to python and data analysis tools that applies to many disciplines. Interesting entry into the data analytics world. Lots of interesting topics and many modern applications. the material can be enjoyable Lots of practice. Very interesting content and I did appreciate how Dr. Moosvi tried to be accommodating of us! The course project, learning logs, online tests, and lab resubmissions. Definitely, the ability to resubmit and bonus tests. Opportunities for students to try again through bonus and resubmissions. This course really help me on self-study skills. because the teaching on lecture are totally different from lab, we need to ask for TA and internet It's rather easy. This course provides a very strong foundation of what is needed for data analysis. In terms of practical use cases, this course has been the most productive for real world applications that I have taken so far. Lenient deadlines. It is my considered opinion that a notable strength of this course lies in the fact that the majority of assessments are open-book. This approach aligns with the practical skills required in real-world contexts, wherein individuals are frequently tasked with solving complex problems and making informed decisions using readily available resources. This course content was very applicable to real life and I could see how the content would be beneficial to know in all sorts of careers and life situations. I really like the project that we had to do because it allowed me to apply the knowledge to something real-world which made the course more fun. A structured curriculum that is designed to build skills and knowledge over time. N/A - Up-to-date with industry standards Exciting group project This course teaches the value of teamwork well, as the project forces people to collaborate and help one another to succeed. Additionally, I feel the labs were a good way to learn the content that lectures fail to teach in depth. While I may not have found the professor's teaching style to be fully aligned with my learning preferences, I must acknowledge that the use of modern technology in the online course was a positive aspect. The project was a good component of the class. The course provides exposure to coding languages like python but so would watching a 30 min video on youtube. It provides an introduction to a wide range of standard tools for data analysis, it has a flexible structure, and it provides a good opportunity for teamwork. data analytics: fundamental to current trend of big data, and a lot of companies wants people to have this skill. This course is practical and let students get to know how to deal with conflicts in groups. Nothing

very hands on, very skill based

Please provide suggestions on how this course might be improved.

Comments

Teaching the material that's in the labs would help a lot.

Already answered above.

No suggestions

- Fewer assignments (i.e. labs, learning logs, tests, bonus tests, milestones) overall. This seemed to be a substantial burden to both students and the markers.

- If there needs to be many assignments, coalesce them into one system, preferably where course discussion happens. (This is already a big step up from having assignments and learning logs broken between PL and gradescope)

Comments

– Auto–grading **with a clear path through which students can get real feedback on their work and request corrections**. As of writing I'm still waiting on several issues from earlier tests incorrectly marking me down on auto–graded questions and I have lost hope.

- Better overlap between tests and bonus tests to ensure TAs have enough time to mark the first before the second is conducted

get a prof who actually knows how to teach

Format the curriculum so you can teach during lectures, and have us practice that material during labs. It was incredibly frustrating having to teach myself how to do all the labs because it wasn't taught.

I think adding more TA's would SUBSTANTIALLY improve this course. I think this term, most problems (like slow marking, difficulty to meet with TA's for project hours, etc.) arose due to not having enough TA's. Of course, I realize TA's are students themselves and have their own workloads hence could not devote all their time to DATA 301 TA'ing, so instead of demanding more from existing TA's, simply hiring more TA's for this course would be a very helpful solution (and it'd be helpful not just academically but also mentally (for students, TA's, and the professor)).

I feel as though the course project feedback was late and I understand that there are a lot of groups, the group members could have been 4 or 5 to lessen the overall workload of the project TA's and the professor as well.

More TA's for project hours and teaching more of the content needed for labs in class.

I feel this course let down its students from the faculty of management. I don't fully know whether fault lies with the university who dictated the curriculum, with Dr. Moosvi who was tasked with teaching the material, or both. It is absurd that this was listed for management students as an introductory course with no pre–reqs required. Hopefully FOM will create a course geared for non–computer science students.

I feel that Dr. Moosvi taught to the computer science students in the class, and despite seeing feedback that many members of the class wanted him to slow down, he disregarded this feedback with the excuse that there was no way for him to win. Maybe that's true that he was placed in an impossible situation in terms of delivering the course content.

Dr. Moosvi is clearly an incredibly smart person, but his teaching style did not work for me. In my opinion, his teaching method is akin to a calculus instructor using lecture time to teach that 2+2=4, then assigning homework that requires advanced knowledge of calculus. Not sure how to do it? Here's a link to a website ... so that I can teach myself calculus? Or an accounting instructor using class time to teach that there are two columns called debits and credits, then assigning homework that asks the student to set up an employee compensation plan for a public company under IFRS. Perhaps I'm exaggerating slightly, but not much, and hopefully you understand my point. And yes, there were workshops for me to attend. But the TAs did not have the time to walk me through concepts step by step. Inn fact, the advice I got in my first few workshops was that my best strategy was to just google it. The only reason I passed this course is because a "tool" recently became available on the internet. I won't say anything more, but I'm sure anyone reading this will know what I mean.

This summer, I plan to take a certificate program using the website datacamp. Even though I'm a management student, I want to learn how to code and I'm interested in analytics. From what I can tell, datacamp is designed for those without prior experience and takes them through python step by step starting with the very basics — plus it's geared toward data analytics (as opposed to codecademy). I suppose I thought that's what this course was going to be. Since Dr. Moosvi likes to use outside sources and tutorials to teach concepts, maybe datacamp could be incorporated?

The course was also structured far too confusingly for me. I still don't know what an "unsyllabus" is, or what the point of contract grading is. Let's just stick to what works, and what students are used to. As well, there so many platforms! Techstack, Github, prairielearn (one for tests and one for bonus tests), visual studio, jupyter lab, ed discussion, canvas, tableau, gitbash, excel I'm sure there's more I'm missing. It's too many and creates undue stress. For computer science students maybe this all is second nature. Not for me. It just made distracted from my learning of the material.

I think the course could narrow its focus. Get rid of the github stuff (branches, switching, pulling rebasing) and also functions and list comprehensions. Let's focus on the basic python needed to wrangle data and spend more time understanding the actual fundamentals behind data analytics and visualizations. Let's focus on communicating information through visualizations and ways data can be presented. This was TOUCHED on only or presented in a very unapproachable way in the labs.

delete some unnecessary things like learning log, or having more TA and grade quickly

Content wise? No. Layout wise, check "Do you have any suggestions for what the instructor could have done differently to further support your learning?"

Due to the wide scope this course has, a lot of the material is not taught in lecture. Because of this, many of the labs can feel like a trial by fire. Lab 9 and 10 for example, were teaching us about Tableau and Excel. However, maybe 10–15 minutes of lecture time was spent actually using the programs and the rest we had to figure out ourselves. On top of this, the instructions gave us very little info regarding how we would go about completing a task except maybe a link to some documentation that usually did not provide the whole story. Did I end up learning a fair amount from these labs? Yes. However, completing these labs have easily been the most frustrating assignments I have ever been given in all of my university career. I think this would be improved by giving us more

Comments

detailed instructions and showing more examples of using these functions instead of just reading paragraphs of documentation.

I think the current systems of grading, assignments, marking, etc is ineffective. Its supposed to be better than traditional methods but in the end its vety slow and frustrating.

It is my suggestion that the course be tailored to the distinct needs of computer science students and non-computer science students separately. This approach would enable a more efficient utilization of course time, as it would allow for a more targeted focus on the specific subject matter and learning objectives that are most relevant to each group. By acknowledging and addressing the divergent needs of these two student populations, the course could provide a more meaningful and effective educational experience for all participants.

I think that it might be beneficial for the students if the course required/suggested some computer coding experience before taking this course because currently no experience is required, however many of the labs and topics are quite difficult with no prior knowledge of coding.

As said before, sometimes the lab content are way ahead of lectures making it hard to complete it and so people are waiting last minute to complete it because they want to learn the content first.

Better alignment of assignments and assessments with course objectives.

Slow down the course. The second half moves waay too fast.

- There should be additional pre-requisites for the course to ensure that everyone is capable of contributing towards the group project

The lectures in this course seem to only ever teach very basic, surface–level concepts. that would not be an issue if not for the fact that the labs are on a completely different level in terms of difficulty. As a result, the lectures do not sufficiently prepare students for the labs, which makes learning stressful and discourages attending the lecture in the first place. Additionally, this course is very harsh on groups whose members dropped out, and as the project takes so much of the course, a single member leaving could ruin the grades of the entire group.

The professor could improve their teaching approach by providing more comprehensive lectures and reducing reliance on external references. Additionally, increased engagement with student queries on the discussion forum would be beneficial, and a reduction in automated grading methods would be appreciated.

Make the project worth more and take away the tests. The project and lab are how I learned in this class, NOT the tests. If the project was worth more ie: 40–50% of the course grade this would motivate people in the group to try harder and not slack off so much.

Improve time management

Teach the content that is gonna be asseed

Provide feedback in a reasonable time

Do not offer retests and resubmissions if you cannot keep up with the quantiy

Do not make project feedback a requirement if your TAs cannot provide it and penalize students

Update the Excel and Tableau lab instructions; they had a few mistakes.

none.

No suggestions.

Just teach the class in a standard way. Stop with the flexible learning. I don't think it helps anyone 'stime management, your TA's are so bombarded, and feedback was never presented on time.

Have more organized lectures with example problems to refer back to.

some more instructions with the labs would help

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