

Description of Your Report

Your Course Evaluation Report contains up to four sets of items, represented in up to four sections in your report, described below.

Sets of Items

Institutional Items

These eight items are consistent across the University of Toronto. They are comprised of:

- Five rating-scale items which represent institution-wide teaching and learning priorities.
 - ◊ **The institutional composite mean, a mathematical average of these first five items.**
- One rating-scale item on the overall quality of a student's learning experience.
- Two qualitative comment items.

Divisional Items

These items are consistent across your division. They represent division-wide priorities for teaching and learning.

Departmental/Program/Course-Type Items

These items (when applicable) represent further levels of granularity and specificity for teaching and learning priorities within your division (e.g., department, program, course type).

Instructor-Selected Items

These items are optional items which may be selected from the item bank by instructors during the question personalization period.

- **Note that the results from these items are only reported to instructors, as they are primarily intended to function as personal formative feedback.**

Report Sections

The following provide different statistical summaries and representations for your institutional, divisional, and departmental/programmatic items (where appropriate).

Section 1: Course Evaluation Overview

Provides all course evaluation data except instructor-selected items.

Section 2: Response Distributions and Additional Statistics

Provides detailed response distributions.

- The number and relative percentage of respondents providing a given answer is provided, along with a graphical representation.
- This section also reports further statistics for each set of items relative to Section 1.

Section 3: Comparative Data

Provides comparative means for your course as compared to the relevant means across *all other evaluated courses at a particular level of comparison (e.g. division, program)* for each set of items.

Section 4: Instructor-Selected Items

Provides data for optional items that instructors can select from the item bank during the question personalization period. This section is formatted identically to Section 2.

Statistical Terms Used in this Report

Mean: The mathematical average. This measure is the most sensitive, and can be greatly affected by extreme and/or divergent scores.

Median: The middle value when all responses are ordered. This measure is less affected by extreme and/or divergent scores.

Mode: The most frequently occurring score.

Standard deviation: A measure of the "spread" of the data.

Course Name: EXPERIMENTAL DESIGN DATA SCI INF2178H-S-LEC0101 Division: SGS Session: S Session Codes: F = First/Fall, S = Second/Winter	Instructor: Rohan Alexander Section: LEC0101 Report Generation Date: June 4, 2020
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Raters	Students
Responded	23
Invited	82

Section 1: Course Evaluation Overview

Part A. Core Institutional Items

Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

Question	Summary	
	Mean	Median
I found the course intellectually stimulating.	3.9	4.0
The course provided me with a deeper understanding of the subject matter.	4.0	5.0
The instructor (Rohan Alexander) created an atmosphere that was conducive to my learning.	3.7	5.0
Course projects, assignments, tests, and/or exams improved my understanding of the course material.	3.9	5.0
Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.	4.0	5.0
Institutional Composite Mean	3.9	-

Scale: 1 - Poor 2 - Fair 3 - Good 4 - Very Good 5 - Excellent

Question	Summary	
	Mean	Median
6. Overall, the quality of my learning experience in this course was....	3.6	5.0

7. Please comment on the overall quality of the instruction in this course.

Comments

I learned a lot in this course. The rest of the first-year HCDS required courses are very intro-level and feel more focused on hard skills. This one was the most focused on being able to put it all together.

The revamped course site and lectures feel more focused than the earlier ones.

I think there should be a dedicated ethics section early on, but this is a larger issue with the way the current HCDS curriculum assumes students come in with an adequate conceptual framework for assessing social/ethical implications to data science and leaves the lone ethics course til the very end.

There are too many assignments, although the instructor did later reduce the workload. The pre-lecture quiz do not provide enough guide on R coding.

Rohan is very accommodating and has great inputs when we were working on our problem sets. It is refreshing to have a prof who helps in understanding a subject so well. Thank you!

Very good, instructor takes a lot of effort to improve the quality

Difficult at the beginning, but increasingly interesting. Notes became quite extensive in the later part of the course.

I thought this course was excellent, I learned a ton, and Rohan was extremely understanding, supportive, very quick to reply to queries, and frequently accommodating given the difficult circumstances we all currently find ourselves in.

This is my second semester and I've taken 7 courses. So far INF2178 is the BEST course offered in iSchool. Rohan has got a talent to create a positive and inclusive atmosphere. He showed us that real people, feelings and emotions are behind all the numbers and formula. I believe that his focus on practical applications of statistics built a strong base for our future in profession of our choice.

Although the professor is new to education, he is very responsive to feedback and has improved a lot from the first class. Although I still sometimes get lost about the course materials, he did a great job of introducing common data science knowledge to non-technical students. One weakness – the workload is a little high for non-technical students, maybe implement the option to submit a draft and receive feedback earlier in the semester so students improve faster.

Instructor is not familiar with the content.

The grading criteria is too subjective.

Excellent. Actually felt like I was learning something and the extra resources that were provided weekly assisted in my understanding of the subject matter. It may have been blunt at times, but I think it was necessary. While I believe I still have some ways to go before I feel like I have a full understanding of everything, I definitely feel I have a greater grasp on the statistical world. I truly felt encouraged to push myself and I feel improved as a result. My motivation for school has also increased. I was honestly losing interest in school and the program and Rohan reinvigorated my excitement for the subject and my future possibilities. It's nice to know that there is something besides just making money for someone else.

Rohan was really good at many different levels. His knowledge on the subject was unquestionable, and he was approachable. His teaching style was super cool too.

The instruction is too tedious, loquacious and overly narrative, but pay less attention to the methodologies themselves. And the methodologies are limited to social science and statistics, not data science. I was hoping to learn data science algorithms, not statistics or how to write paper. If we are required to learn social science methodology or statistics, I would rather take another course with Prof. Jia XUE.

The professor may have a lot of knowledge on the concepts taught in class but he doesn't deliver/teach the material effectively. He doesn't teach the material in an engaging way and doesn't explain the material well either. It's disappointing after the lecture ends that I felt that I learnt nothing. Because of this, I didn't bother to go to his tutorial sessions, to this day I don't even know if the tutorial sessions are helpful or not.

In terms of the assignments in this course, the professor, doesn't spend enough time to clarify aspects of the assignments in class. For example, during problem set 1, when we got our grades back, the professor gave us comments regarding something he never mentioned clearly in class. My group told the professor about this in week 4 (after the grades released) and he said all the material regarding our concerns were present on Quercus under week 4. The submission for the assignment was in week 3 and he said after the submission all the material was under week 4. Wouldn't it make sense to include the material in earlier weeks so students know about such important information which could affect our grades? Generally the professor posts the rubric of the assignments on Quercus but doesn't go into detail what to expect as I don't even know what he expects and I'm making assumptions. My group and I spend a lot of time working on the assignments, with no explanation on what the professor expects, it gets harder every assignment.

I've never used any lecture material in my assignments as the professor doesn't deliver the material effectively. I would just google everything to teach myself and figure out what would help me with the assignment and hope for the best. This pandemic that has forced us to have online courses has also forced the professor to alter the course structure. A couple of heavy assignments were

Comments

either changed significantly or redeemable by other assignments. This was probably the best thing that has happened in this course as I wouldn't have been able to write the final report in the course (which was redeemable by other assignment grades). For every assignment, I had to self-teach myself and this would have been difficult working on the final report since the end of a semester, everything becomes hectic and there isn't enough time to teach myself the necessary concepts.

In the end, my only concern for this course were my grades. I didn't learn any new concepts in class and I didn't even improve my R-Studio skills. I attended every lecture in this semester hoping to learn something in an engaging way or the professor taking time to talk about the assignments. Now I realize that if I skipped all the lectures, I would still feel lost and confused in this course as I originally was. If this wasn't a mandatory course for the Human Centered Data Science concentration, I would have dropped the course after attending the first lecture.

Very high quality – Rohan's lectures covered a very broad range, from building arguments using statistics through to implementing them in R (to humorous anecdotes and asides that were usually relevant) to thoughts on what data science is and where it's going. The labs and tutorials covered very useful supplementary material as well.

This has been one of the most useful courses I've ever taken because of the vertical nature of its design – data science is highly interdisciplinary and relies on a multitude of different skills. I feel that Rohan's done an excellent job covering different parts of that skill stack in a cohesive way.

Just the course notes and reading list alone are extremely valuable, and I intend to download them at the end of the course for later reference.

It should also be noted that Rohan's response to the coronavirus situation was exemplary – he communicated very clearly and did everything he could to ensure students could still get the most from the course despite the circumstances.

I only have good thing to say about this course. Rohan is an absolutely amazing instructor and I am just amazed at how he managed make all these changes to his lecture style, the style of his notes, the style of the tutorials in just a few weeks. He is super approachable and very easy to reach out to for help. He will answer all the dumb questions without making you feel dumb. just an awesome instructor.

I knew of R and but i didn't know how exactly to use it. I am amazed at how comfortable I felt with using R just after a few weeks and now I can clean and run specific types of tests on datasets. It was a very challenging start to the course but I can't imagine it being taught in any other way. I loved how we got explore our own questions and use datasets we felt interest about. After this course, I finally understand what it means to use programming logic across different languages. Once, I saw a webpage explaining pandas in python and how to clean and manipulate datasets and it felt like I could use pandas right away even though i had only been exposed to it once during the python bootcamp at orientation. I really liked how rohan also exposed us to different R applications like shiny and blogdown and how his notes are easy to follow and flow easily. the way he write his notes is like he is having a conversation with us and the examples in the notes can easily be replicated in R.

I really appreciated his approach to ethics. I always thought ethics was only applicable if you were using information that could effect people in a negative way but he showed us how important it is to think about the ethics even with the simplest of datasets. Looking forward to taking more course with him. I don't think anyone could have taught this course as well as he did. Keep him at the ischool!!

Firstly, I'm very disappointed with professor Rohan and this course for a number of reasons where I hope my voice is clearly projected to the faculty of information. Professor never clarified anything beforehand. For example, during problem set 1, when we got our grades back, the professor gave us comments regarding something he never talked about in the class. He mentioned why is our abstract longer than the introduction. We have learnt from other courses this format and the professor graded us down for not doing what he expected. How are we supposed to do something if he didn't tell us beforehand? I told the professor about this in week 4 and he said all the material regarding this is present on Quercus under week 4. The submission for the assignment was in week 3 and he said after the submission all the material was under week 4. Wouldn't it make sense to include the material in earlier weeks so students know about such important information that could affect our grades? My point is that the professor is not organized which is putting an effect on our grades unnecessarily. Another example was during problem set 4, when the majority of the students were about to submit their assessment which was based on content that the professor never taught in class, he stated in an announcement that everyone's problem sets are "not good" which is affecting our ethics section. Wouldn't it make sense if the professor told us this earlier, so we could take this into account earlier and avoid unnecessary circumstances like this to arise? The coronavirus pandemic situation has made it very challenging for my group to make necessary adjustments, due to the professor's poorly planned approach to providing the class to complete the assignment. My group and I are very disappointed with Rohan and would strongly encourage the faculty of information to take our feedback into consideration. Rohan has given us a very hard time due to the fact that he assigned assignments to complete in class based on material he did not even hint upon in class. For example, problem set 4 mentioned utilizing a/b testing. How would someone from a business background understand what a/b testing is in terms of data science? It would be good if the professor at least talked briefly about what he expects us to complete in the assignments as well as provide an interesting description in class. Not only that but wouldn't it be almost impossible for such students to complete the assignments, where the professor on top of that criticizes every problem in the completed assignment? These criticisms would be based on material in which he never spoke about in class. As an individual who wanted to gain

Comments

something out of this course, I have actually been put in a very hard time where I had to force myself to get extra tuition outside the University of Toronto due to the nature of the professor and class.

Due to the coronavirus pandemic situation, the professor offered our class to send over their assignments to him so that he may provide us with his feedback to improve our assessments prior to submission. I really appreciate that the professor has offered us this, but after we submitted the problem set 4 assignment, we asked the professor for our grades and he replied along the lines "DO NOT ASK FOR YOUR ASSIGNMENT TO BE PROVIDED ANY FEEDBACK AS IT'S UNFAIR FOR OTHERS". From this point onwards, we completed all assignments without any interest in the course while having walked away very disappointed with the course and its content.

8. Please comment on any assistance that was available to support your learning in this course.

Comments

I think the R-focused lab + tutorial combo worked better than the split-up tutorial sections. Changing up topics to fit students' interests and needs was great.

The whole coronavirus situation was handled really well. Thanks for the flexibility and compassion.

Everything was great, inspite of moving the classes online

All good

Rohan is always happy to answer any questions from us.

Office hour, after-class lab, reading materials. A very good setting for support.

Extensions were available when needed. I felt incredibly supported before and during the corona virus situation. Very approachable and easy to discuss topics of concern. Emails returned promptly. Have never felt more support in a class. Seriously, thank you for all that you did. I don't think it was entirely appreciated or understood by the class, but some people have yet to grow up or have never been allowed to fail. People coming from programs that have always had one answer may not have had to critically assess their own work before and are unused to not having just an answer.

Rohan would continuously review our work and give us feedback and was always open to questions. The level of support we received from him is extraordinary. he went above and beyond to help us into the course.

Not that I know of. Prof tried to be helpful but the course assignments were too much for us.

During breaks within class we could ask the professor about our assignments or about the course material. But his feedback isn't always helpful, sometimes his answers are vague not answering our concerns that affected our grades significantly. But at other times his feedback is helpful, for example, the professor would give feedback for our problem sets if we submitted it early and we had the ability to re-submit again. The feedback in these instances were helpful but when we re-submitted, there were always other criticisms that he failed to mention earlier. My group members and I thought that a particular section of the assignment was good so we didn't change/alter anything but in the end it wasn't. I felt it pointless asking for any feedback and did my assignments assuming what he would and wouldn't appreciate.

For the course, there are five problem sets and the professor mentioned that he would only consider the best four. So my group and I had our grades released for the first three problem sets. As we just submitted the fourth problem set, we emailed the professor just to ask when can we expect grades to be released for problem set four. We didn't want to waste time doing the fifth/final problem set with a relatively high grade as its a waste of our valuable time (as it doesn't boost our final grade). The response we got back was along the lines that we shouldn't constantly ask about our grades and we're asking for some sort of special request. I'm sorry that I couldn't care about the course material and the only thing I care about is my grade and working on necessary assignments that will give me a satisfying final grade.

Rohan made himself very available to anyone who had questions or needed help. He was extremely supportive and invested in the success of his students. The TAs were also very helpful in answering specific questions.

michael was a great TA, super approachable, super down to earth and very knowledgeable. Just wish we got to have more tutorials with him

The internet, as well as the resources provided, were useful, but the course structure was not. I wish there could have been an improvement in that aspect.

Part B. Divisional Items

Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

Question	Summary	
	Mean	Median
9. The course instructor (Rohan Alexander) encouraged students to think about the subject matter from multiple perspectives.	3.8	5.0
10. The course instructor (Rohan Alexander) encouraged me to explore alternative approaches when problem-solving.	3.9	5.0
11. The course drew attention to ethical and social issues related to the field of study.	4.2	5.0
12. The course instructor (Rohan Alexander) encouraged students to reflect critically on the course material.	3.9	5.0
13. The course instructor (Rohan Alexander) explained how course topics contributed to an overall understanding of the field.	3.8	5.0

Section 2: Response Distributions and Additional Statistics

This section provides detailed response distributions.

Mean: The mathematical average. This measure is the most sensitive, and can be greatly affected by extreme and/or divergent scores.

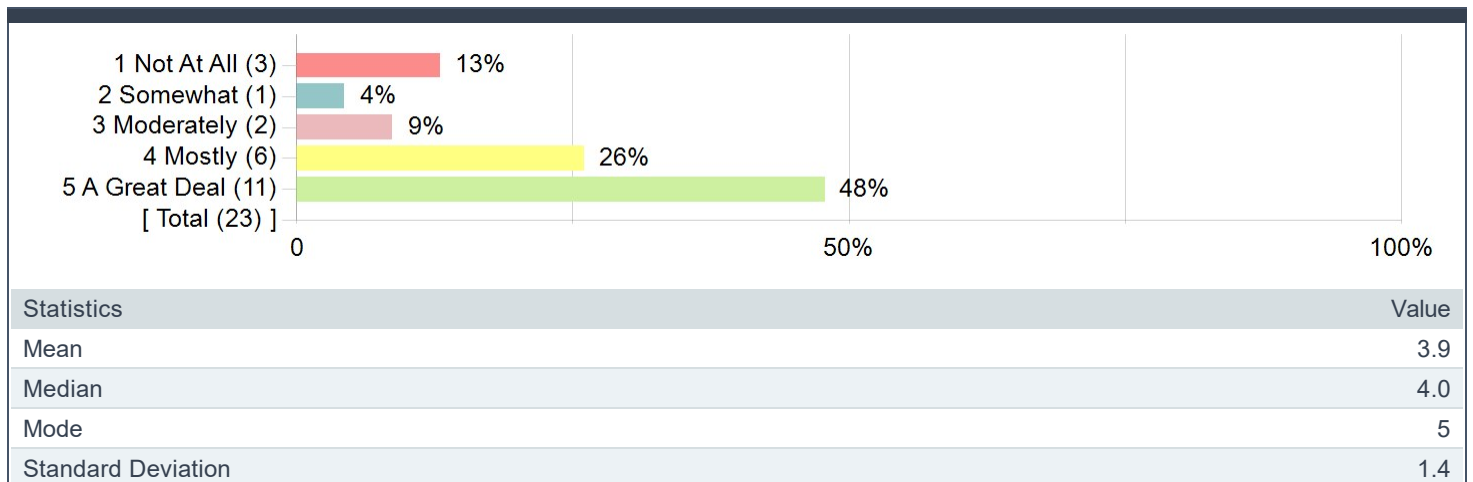
Median: The middle value when all responses are ordered. This measure is less affected by extreme and/or divergent scores.

Mode: The most frequently occurring score.

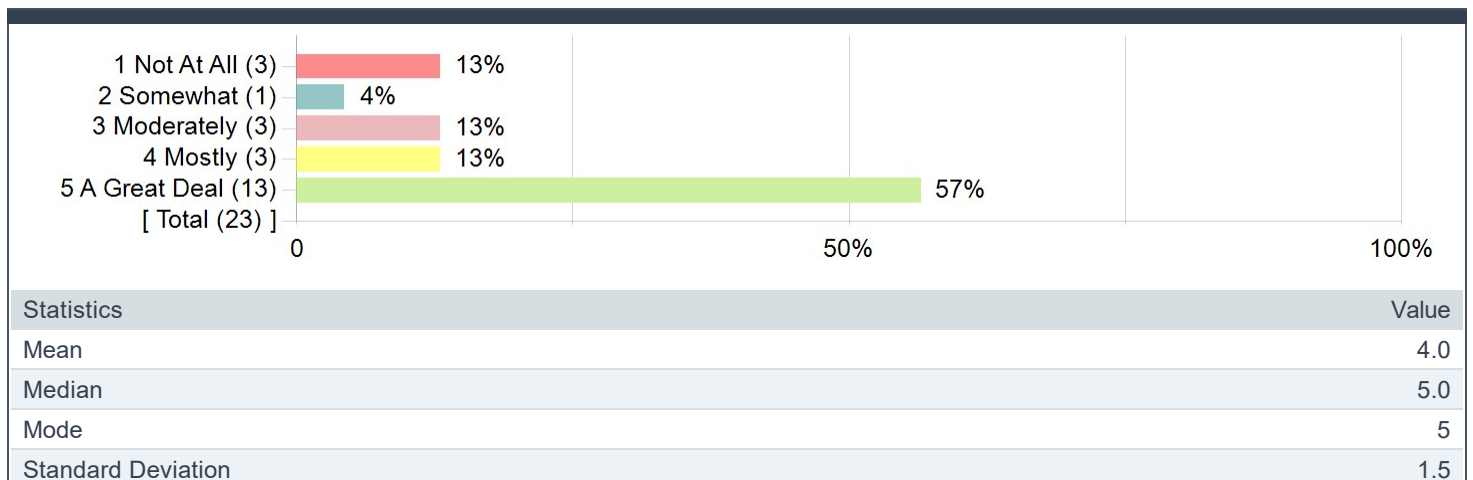
Standard deviation: A measure of the "spread" of the data.

Part A: Core Institutional Items

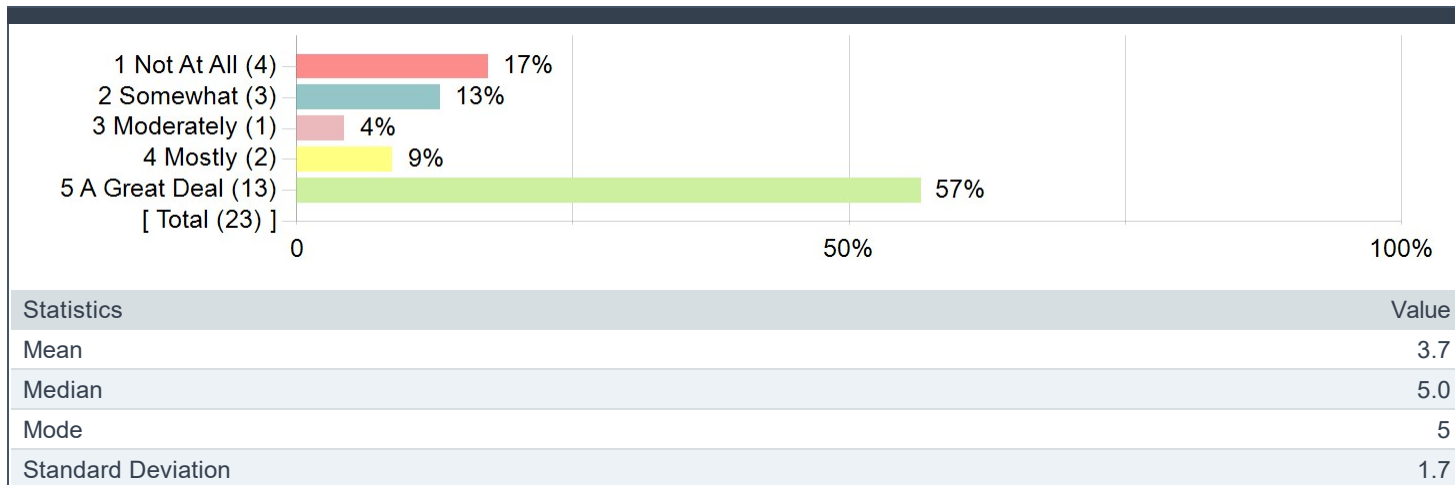
1. I found the course intellectually stimulating.



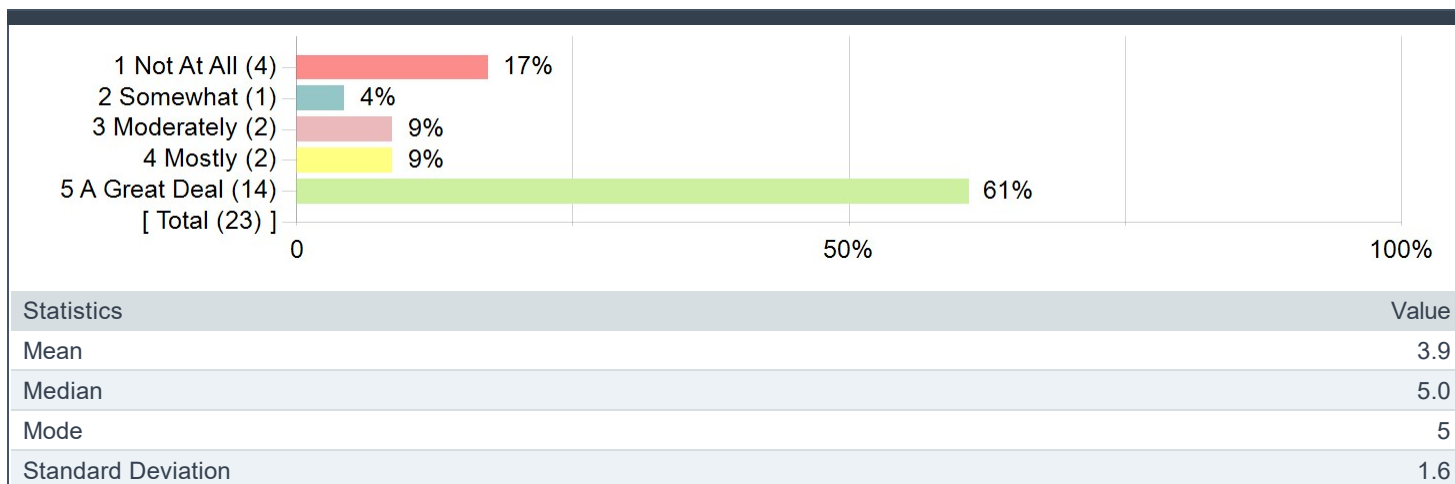
2. The course provided me with a deeper understanding of the subject matter.



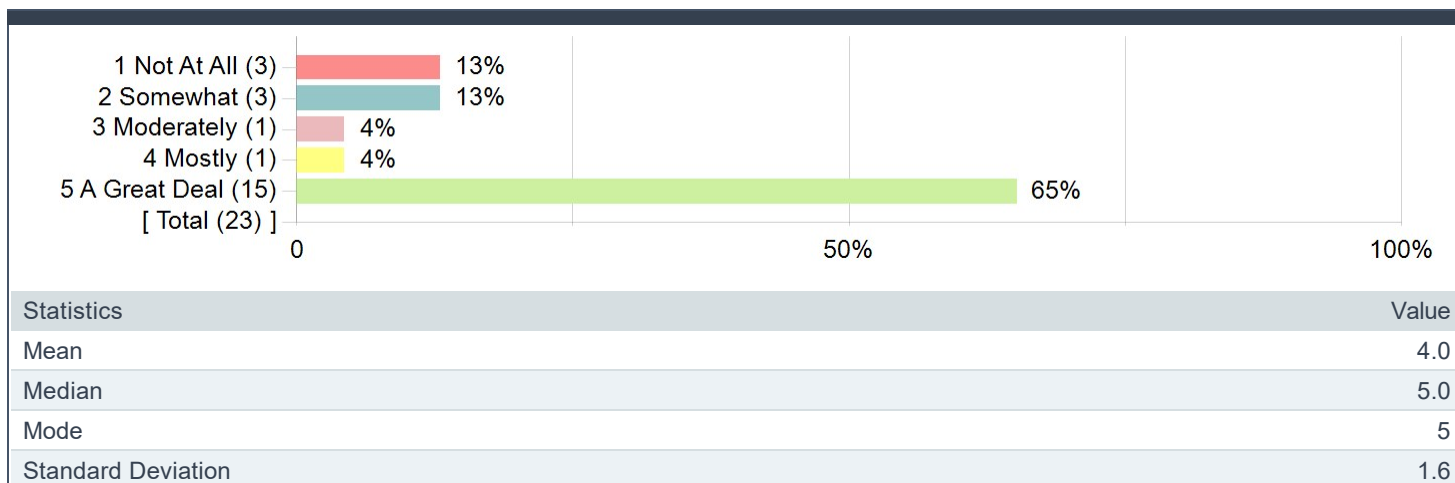
3. The instructor (Rohan Alexander) created a course atmosphere that was conducive to my learning.



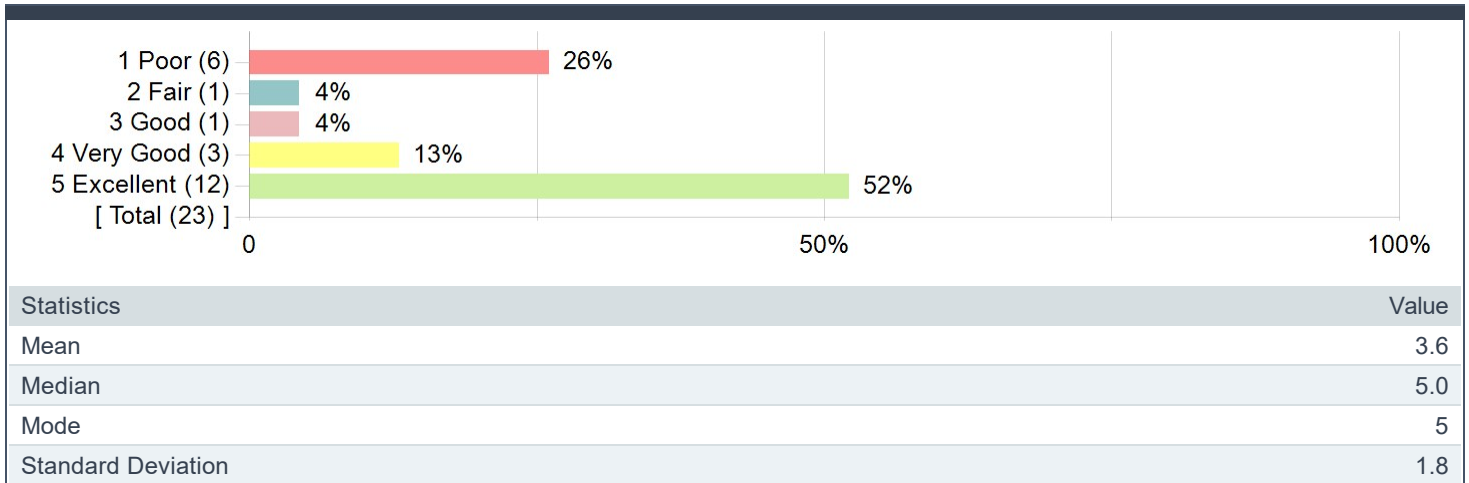
4. Course projects, assignments, tests and/or exams improved my understanding of the course material.



5. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.

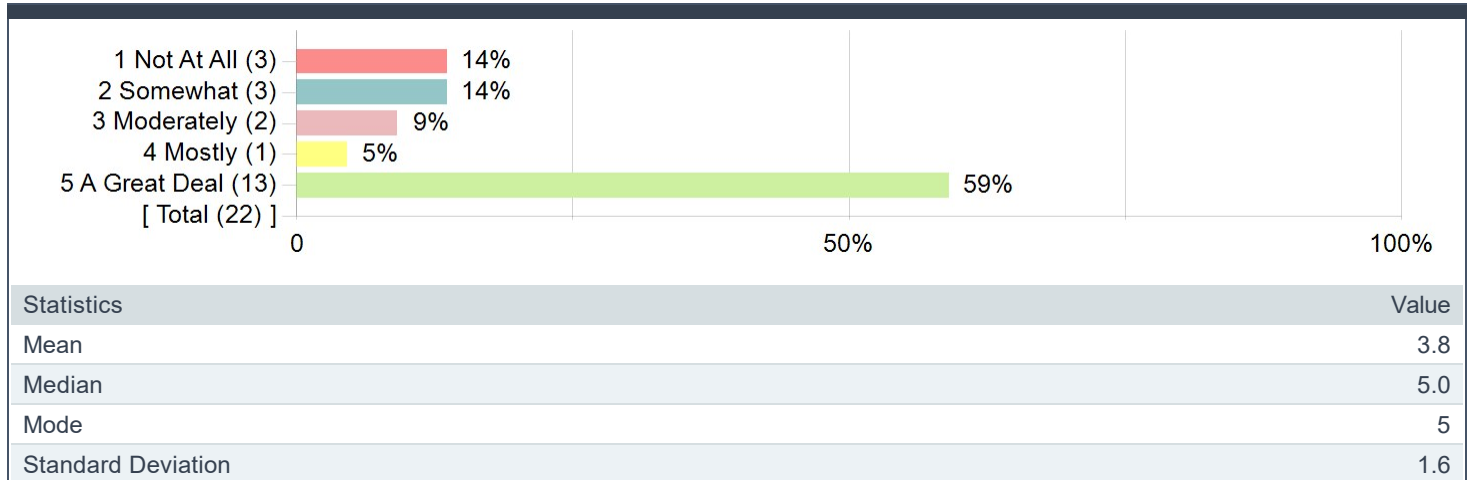


6. Overall, the quality of my learning experience in this course was....

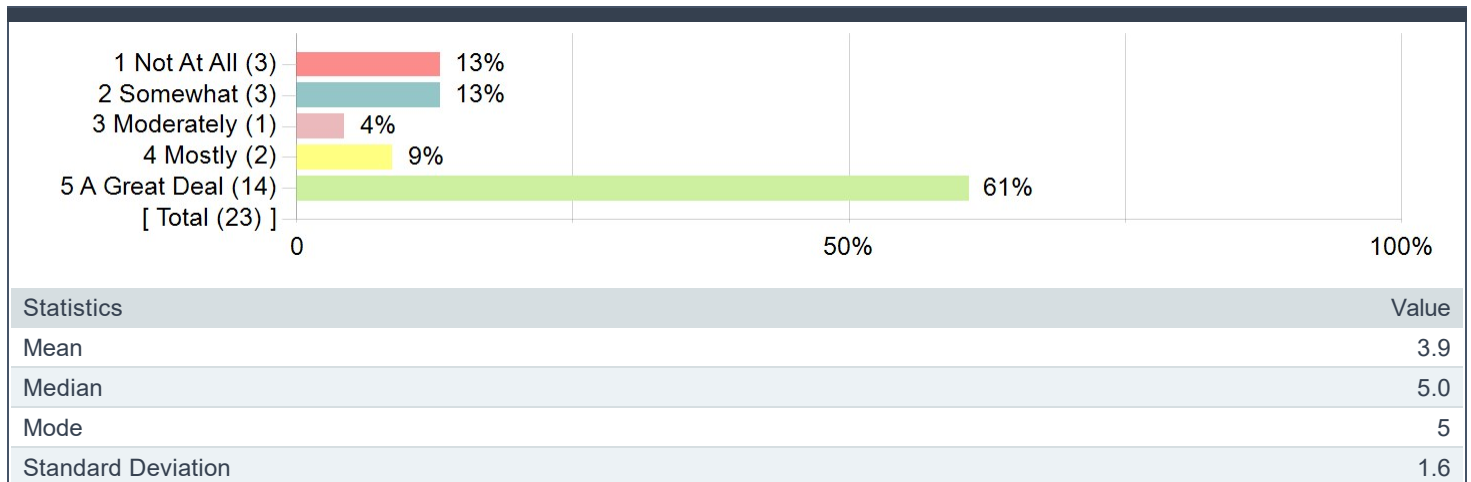


Part B. Divisional Items

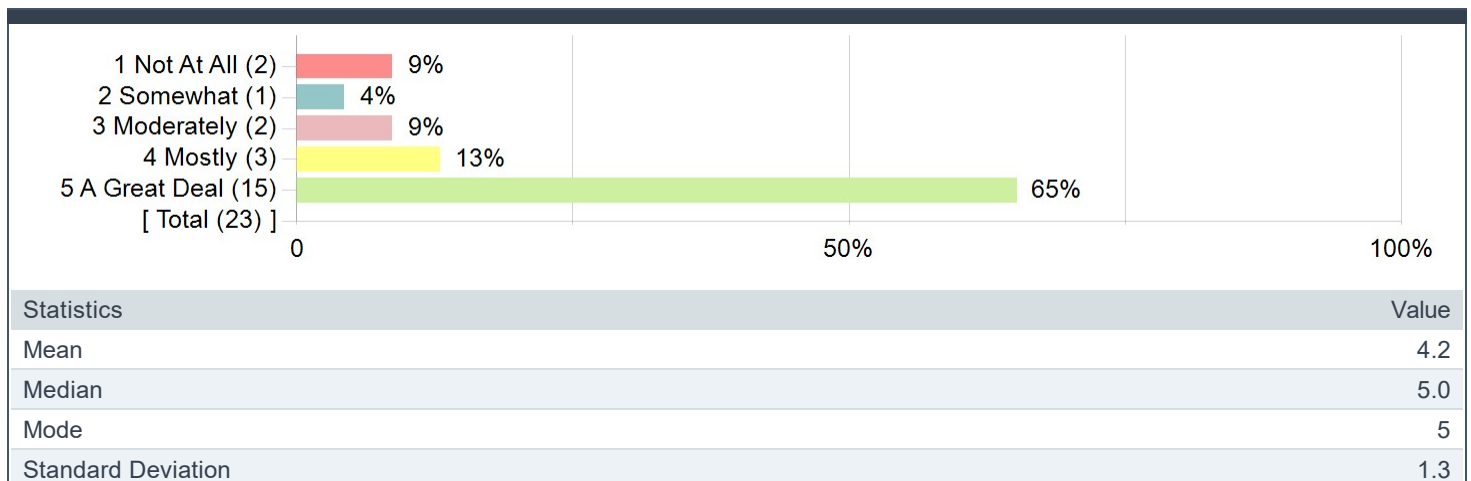
9. The course instructor (**Rohan Alexander**) encouraged students to think about the subject matter from multiple perspectives.



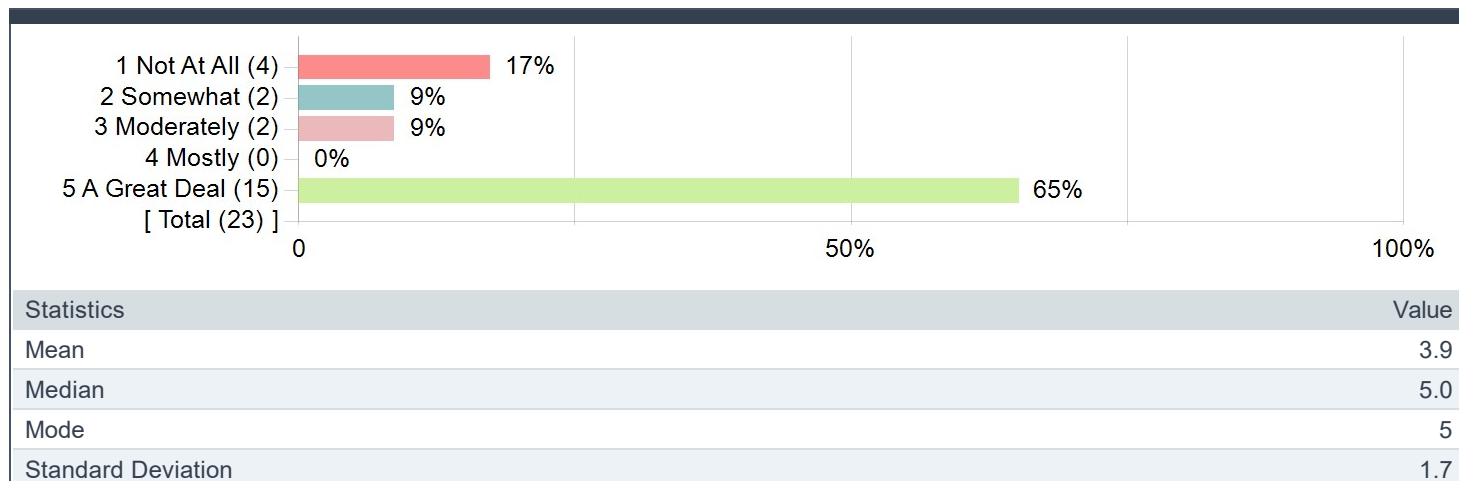
10. The course instructor (**Rohan Alexander**) encouraged me to explore alternative approaches when problem-solving.



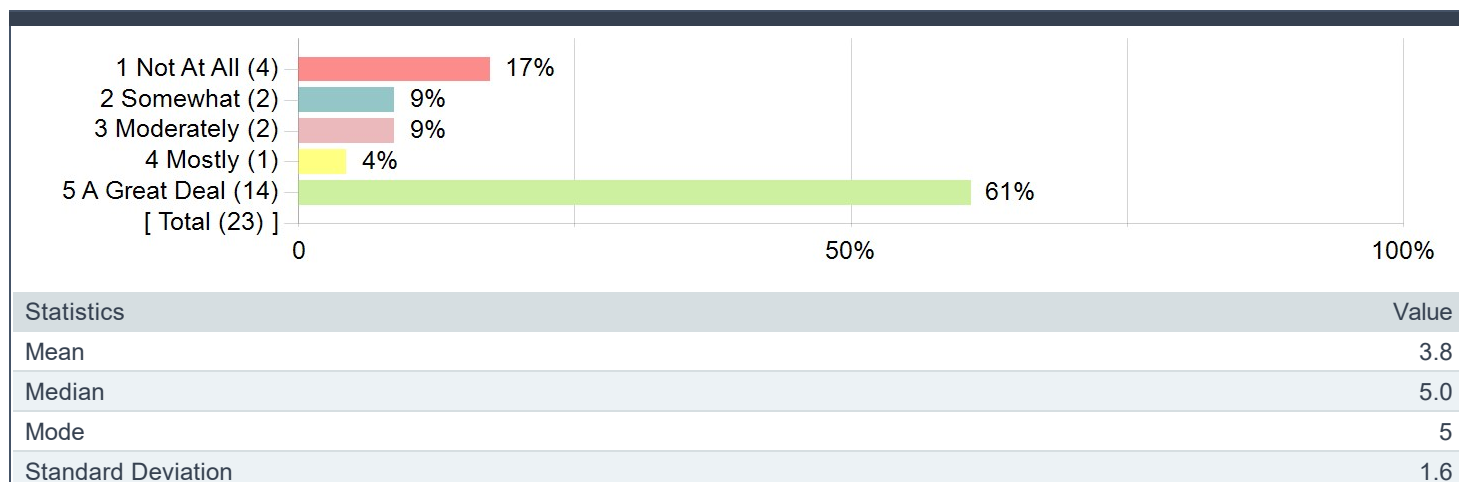
11. The course drew attention to ethical and social issues related to the field of study.



12. The course instructor (**Rohan Alexander**) encouraged students to reflect critically on the course material.



13. The course instructor (**Rohan Alexander**) explained how course topics contributed to an overall understanding of the field.



Section 3. Comparative Data

This section provides overall means for given comparators (e.g., division, department) alongside the mean values for a given course. Note that the comparators are calculated by pooling together all individual student survey responses (e.g., student responses for all of the courses in a department are pooled together and the departmental mean responses calculated from that). The provided comparators are thus a measure of the 'average' student experience for a unit or division; they are not a measure of the 'average' course in a unit or division. This calculation has the effect of giving large courses more 'weight' in the calculation of the comparator means. The effect of this on the calculated comparator varies depending on the relative proportion of large or small courses within a unit or division. As such, the departmental and divisional comparative mean values provided on course evaluations should not be regarded as an absolute and definitive benchmark.

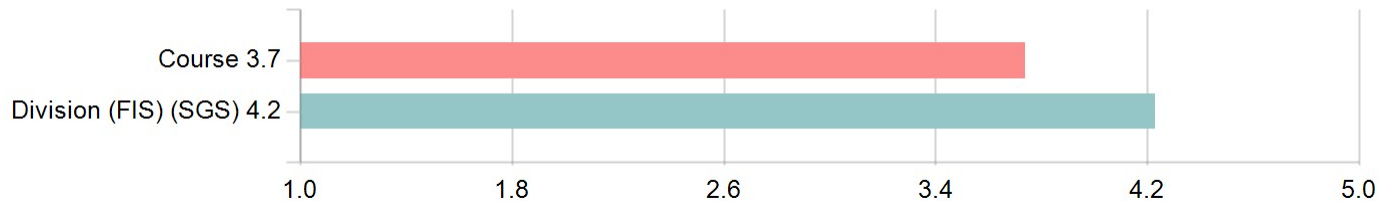
For example, if a department offered only two courses, one with 1000 students who all answered 3.5 and the other with 10 students who all answered 4.5 (so that the means would be 3.5 and 4.5 respectively), then the departmental mean provided on the course evaluations would be 3.51 since the calculation would be $[(3.5 \times 1000) + (4.5 \times 10)] / 1010 = 3.51$ and not $(3.5 + 4.5) / 2 = 4$.

Part A. Core Institutional Items

Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal



3. The instructor ([Rohan Alexander](#)) created an atmosphere that was conducive to my learning.

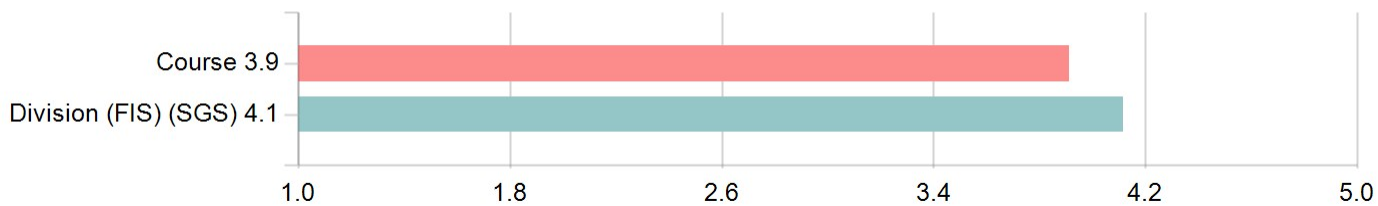


Part A. Core Institutional Items

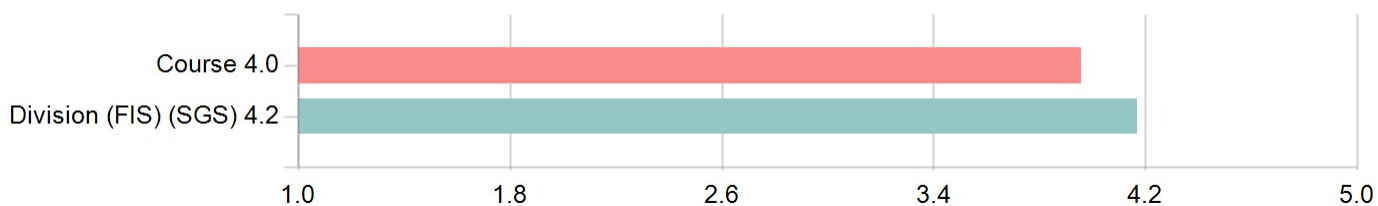
Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

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4. Course projects, assignments, tests, and/or exams improved my understanding of the course material.

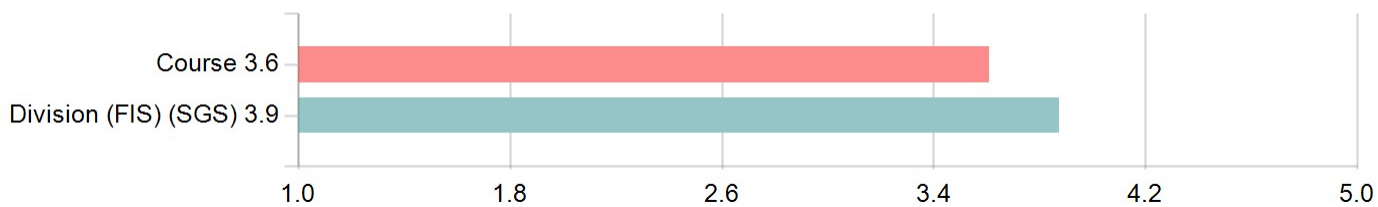


5. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.



Scale: 1 - Poor 2 - Fair 3 - Good 4 - Very Good 5 - Excellent

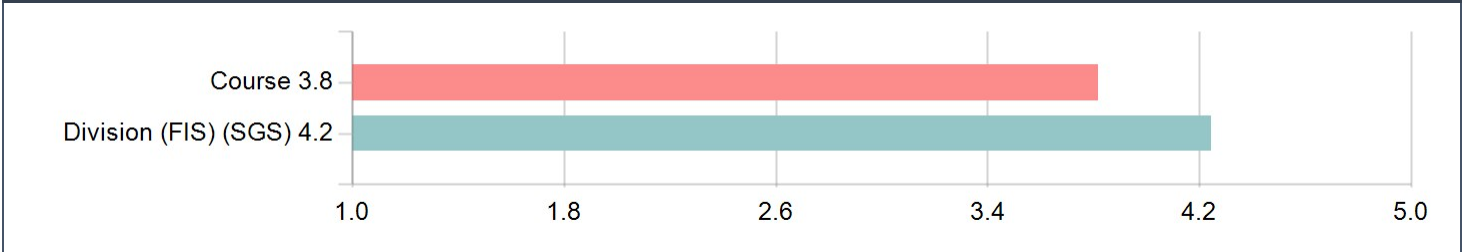
6. Overall, the quality of my learning experience in this course was:



Part B. Divisional Items

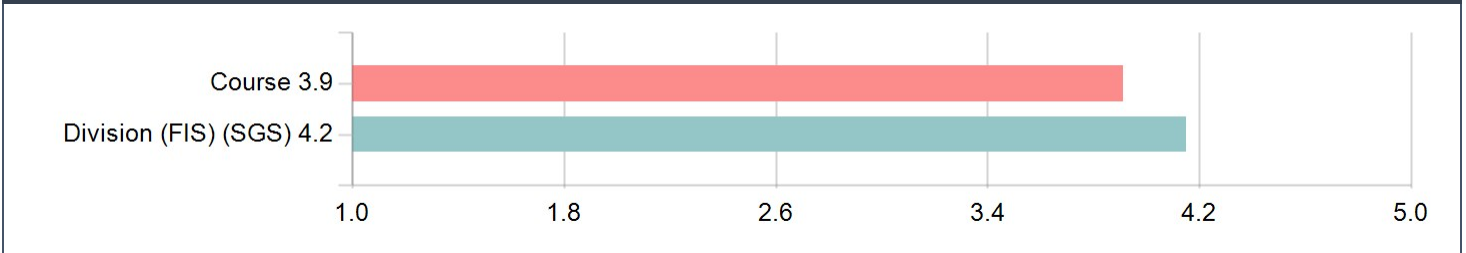
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9. The course instructor (**Rohan Alexander**) encouraged students to think about the subject matter from multiple perspectives.



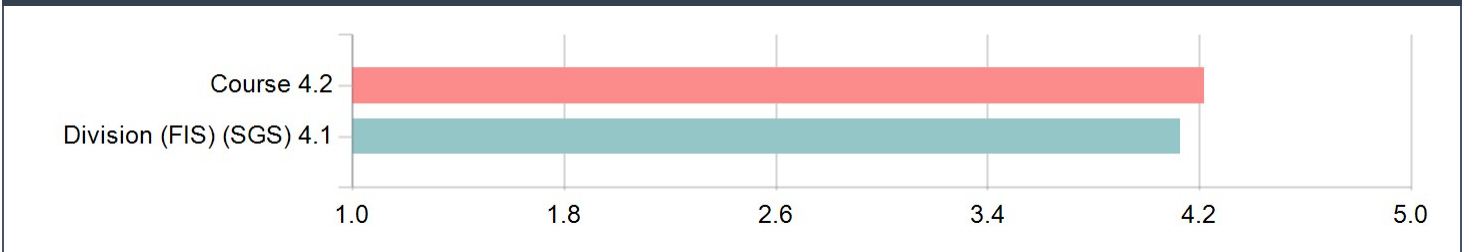
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10. The course instructor (**Rohan Alexander**) encouraged me to explore alternative approaches when problem-solving.



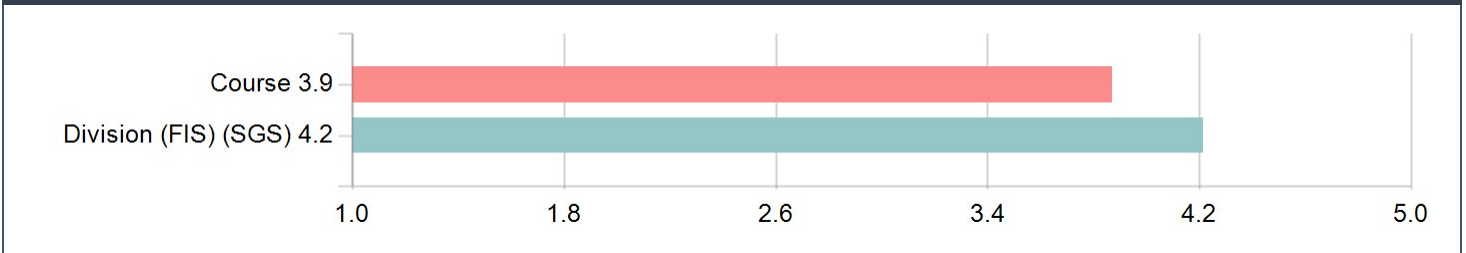
Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

11. The course drew attention to ethical and social issues related to the field of study.



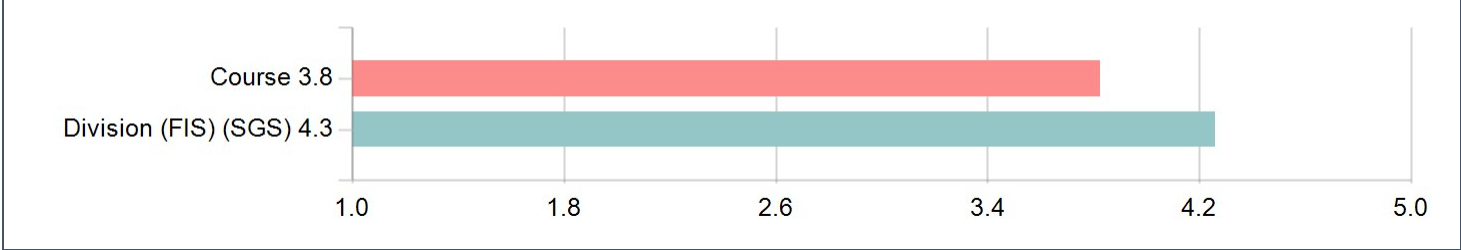
Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

12. The course instructor (**Rohan Alexander**) encouraged students to reflect critically on the course material.



Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

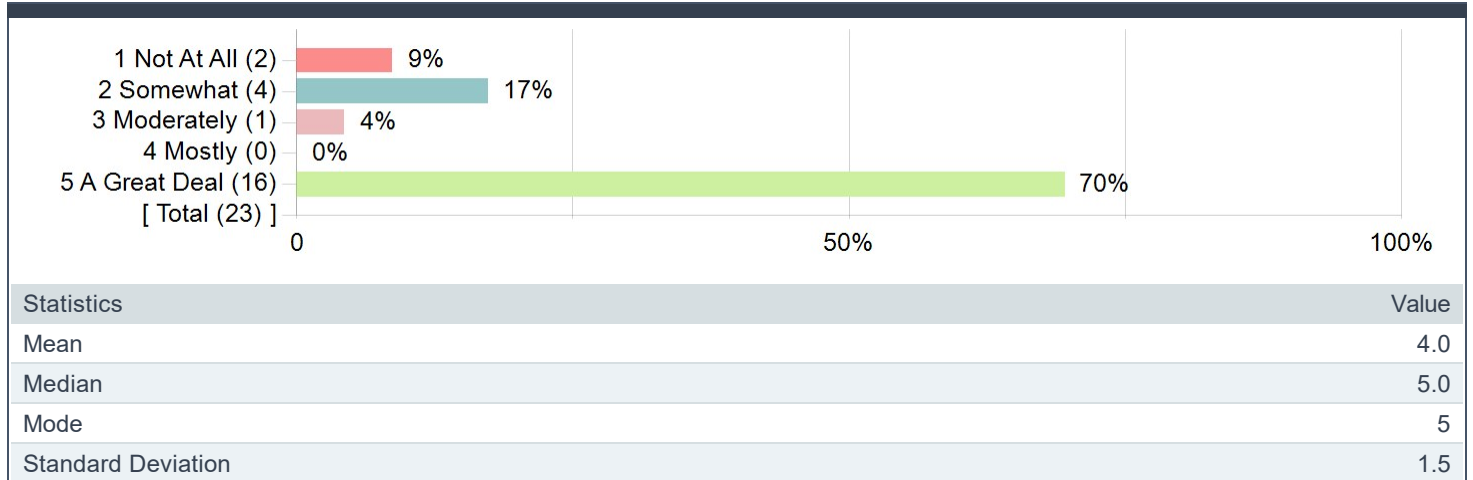
13. The course instructor ([Rohan Alexander](#)) explained how course topics contributed to an overall understanding of the field.



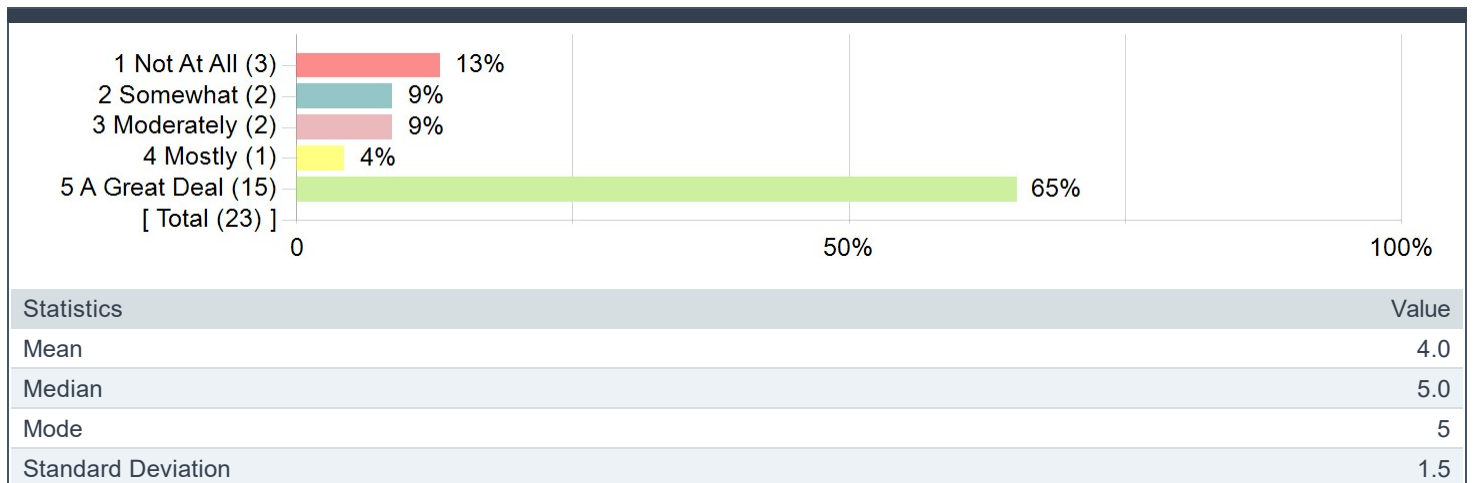
Section 4: Formative Data

These items are optional items which you selected from the item bank during the question personalization period. Note that the results from these items are only reported to you as they are primarily intended to function as personal formative feedback.

C-1. The course instructor ([Rohan Alexander](#)) was enthusiastic about the course material.



M-2. The course instructor ([Rohan Alexander](#)) encouraged students to think beyond the course material.



W-4. I would recommend this course to others:

