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.

FAS Fall 2018 Undergrad

Course Name: Machine Learning CSC411H1-F-LEC0101
Division: ARTSC
Session: F
Session Codes: F = First/Fall, S = Second/Winter

Instructor: Amir-massoud Farahmand
Section: LEC0101
Report Generation Date: January 9, 2019

Raters	Students
Responded	24
Invited	55

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.	4.0	4.0
The course provided me with a deeper understanding of the subject matter.	4.0	4.0
The instructor (Amir-massoud Farahmand) created an atmosphere that was conducive to my learning.	3.7	4.0
Course projects, assignments, tests, and/or exams improved my understanding of the course material.	3.8	4.0
Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.	3.6	4.0
Institutional Composite Mean	3.8	-

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

Question	Summary	
	Mean	Median
Overall, the quality of my learning experience in this course was:	3.2	3.0

Not sure if comments/evaluation applies to me or other instructors.

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

Comments
Really clear, although hard.
I attended lectures with Roger Grosse. I found the class relatively hard to follow. There are a great number of topics and they did not seem to lead into one another, with quite a bit of disconnect. Quite math– and derivation–focused, with less of an emphasis on understanding of concepts. Comparatively, CSC321 (now CSC421) was much easier to follow, much more engaging, and provided a much better understanding of basic machine learning concepts. Things I learned in CSC321 have stuck with me; I don't expect as much to stick with me as CSC411.
It would help me more if more time was spent behind the intuition of each concept. I think I speak for the majority of the class that we can figure out the nitty gritty math behind each concept (given some time) but it would be easier to grasp if the bigger picture was more clear.
Although the material is difficult, the professors were resourceful and explained it well. The slides were informative, and supplementary readings and links were helpful in completing assignments too.
.....the course is too hard
I feel like this course was designed as a review of various machine learning concepts. I feel like we cover too much too quickly and with not enough detail or time to actually understand what's going on. I also feel like the prerequisites for this course are inadequate as I have absolutely struggled with the linear algebra and statistics involved. I feel that without prior knowledge in the subject matter, it's extremely difficult to keep up in this course or actually follow along in lecture.
Tutorial hours were provided everyday and often very helpful. The profs were also providing office hours and very helpful.
Good
I attended the lectures of Juan Carrasquilla. He is somewhat monotone and sometimes appeared to be seeing the slides for the first time during lecture. He is very knowledgable about the content of the course
The instruction was clear.
very good notes and well–organized.
pretty good !
The materials of this course are very difficult. And the pace of lecture progression is super fast (2 chapters each lecture) I wish in the lecture they would go slowly and explain step by step in detail.
Quite good. Some of the later lectures felt a bit rushed; but there is a lot of material to cover.
lectures were really unclear. each homework is not really helping. basically I have to learn most of part on myself, attanding lecture help a little.
NOTE: I ATTENDED PROFESSOR GROSSE'S THURSDAY SECTION, NOT AMIR'S MONDAY SECTION. Prof. Grosse is a fantastic lecturer. I think it would be helpful to go through mathematical derivations a little slower. Maybe add "steps" to the slides to show each step in the derivation, this can make it a little more clear the steps of the derivation. Overall, he does a great job of connecting interesting concepts throughout the course, and provides interesting visualizations. I think it would be helpful to stop more often to ask questions to the class, to check understanding and to keep us active participants in the lecture. I think it would be more interesting for tutorials to go through problems, similar to what the exam and midterm review tutorials were like. Since most TAs are not as experienced in lecturing, I think this would make better use of the TAs time. For this it might be necessary to have smaller TA rooms. But I think going through problems would be more instructive than going through more content. I think it would be better to post more readings for those who are interested, and use tutorials to reinforce the concepts in lecture in a more active manner, bridging the gap between lecture and tutorial. I wish readings had been posted more consistently, and that homeworks were posted at a more consistent time on the day they were posted. It would also be helpful if homeworks were returned sooner.
Although this course was well–instructed and the material is broad, having taken CSC321 last year, I feel that the decision to get rid of CSC321 and have CSC411 be the required prerequisite for CSCS421 is a mistake. I enjoyed CSC321 much more than CSC411, and think it was a great introduction for students to machine learning. The emphasis on math in 411 could turn people off of machine learning; contrastingly, the good balance of math, concepts, etc. in 321 was a welcome introduction. If interested in further detail, students could then choose to take 411. It is my belief that the faculty should reconsider this move to replace 321 with 421 and have 411 as a required prerequisite.

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

Comments
Office hour, papers, notes, and assignments.
Professor office hours and TA office hours were both very helpful.
...Make it easier?
TAs, office hours... all very very helpful.
The office hours were crowded. And I didn't find the tutorials particularly useful.
more notes plz
The piazza was helpful for getting help.
The instructor has a lot of office hour during the week.
office hours and tutorials
The homeworks are very helpful to understand the material.
Piazza worked, answers were prompt. Other than that I did not really use any other support (e.g. office hours)

Part B. Divisional Items

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

Question	Summary	
	Mean	Median
FAS001 The instructor (Amir-massoud Farahmand) generated enthusiasm for learning in the course.	3.9	4.0

Scale: 1 - Very Light 2 - Light 3 - Average 4 - Heavy 5 - Very Heavy

Question	Summary	
	Mean	Median
FAS002 Compared to other courses, the workload for this course was…	4.4	4.0

Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - Strongly

Question	Summary	
	Mean	Median
FAS003 I would recommend this course to other students.	3.4	4.0

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.

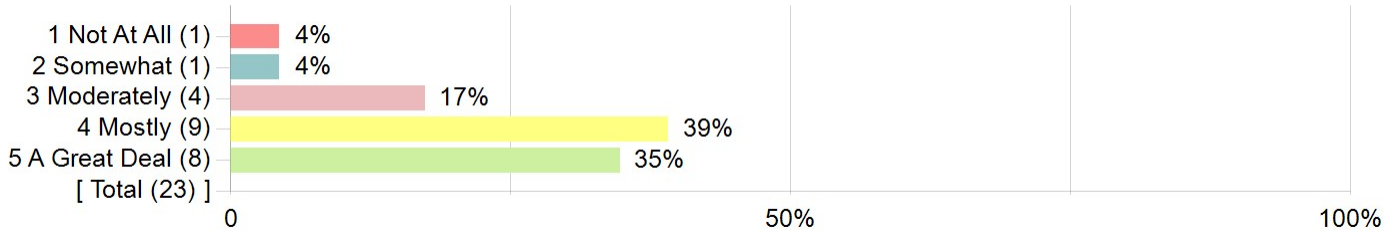
Median: The middle value when all responses are ordered. This measure is less affected by extreme and/or divergent scores.

Mode: The most frequently occurring score.

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

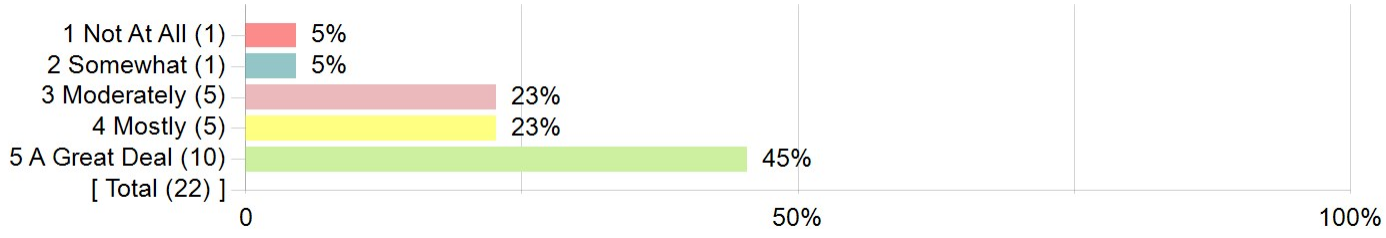
Part A: Core Institutional Items

1. I found the course intellectually stimulating.



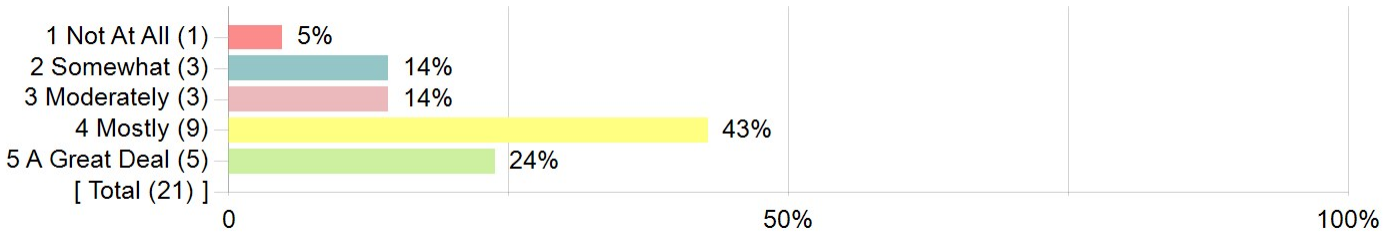
Statistics	Value
Mean	4.0
Median	4.0
Mode	4
Standard Deviation	1.1

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



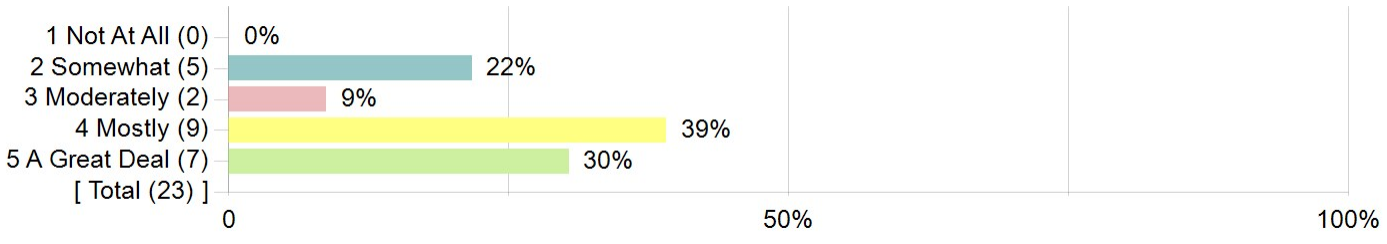
Statistics	Value
Mean	4.0
Median	4.0
Mode	5
Standard Deviation	1.2

3. The instructor (Amir-massoud Farahmand) created a course atmosphere that was conducive to my learning.



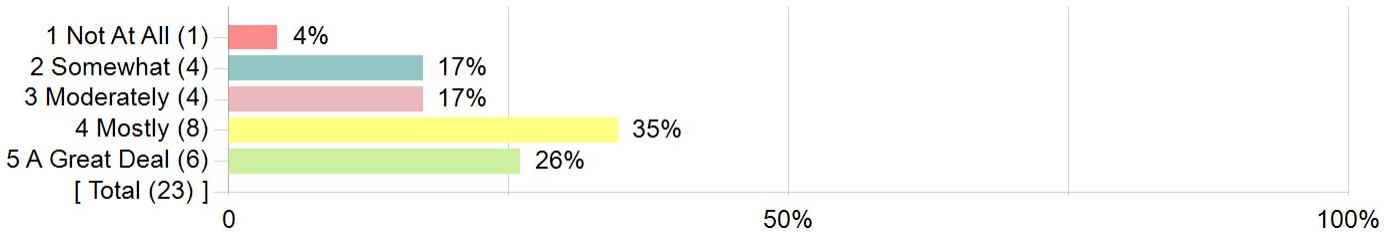
Statistics	Value
Mean	3.7
Median	4.0
Mode	4
Standard Deviation	1.2

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



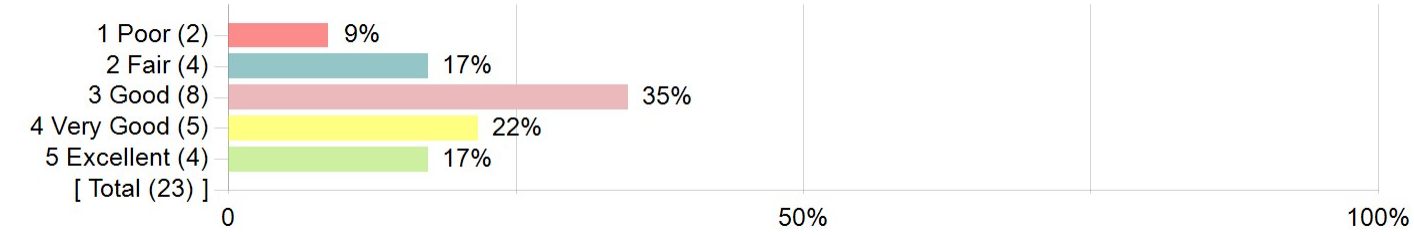
Statistics	Value
Mean	3.8
Median	4.0
Mode	4
Standard Deviation	1.1

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



Statistics	Value
Mean	3.6
Median	4.0
Mode	4
Standard Deviation	1.2

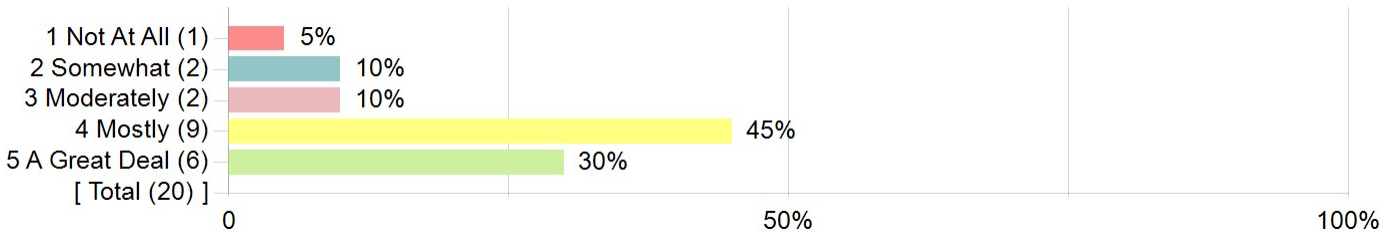
6. Overall, the quality of my learning experience in this course was….



Statistics	Value
Mean	3.2
Median	3.0
Mode	3
Standard Deviation	1.2

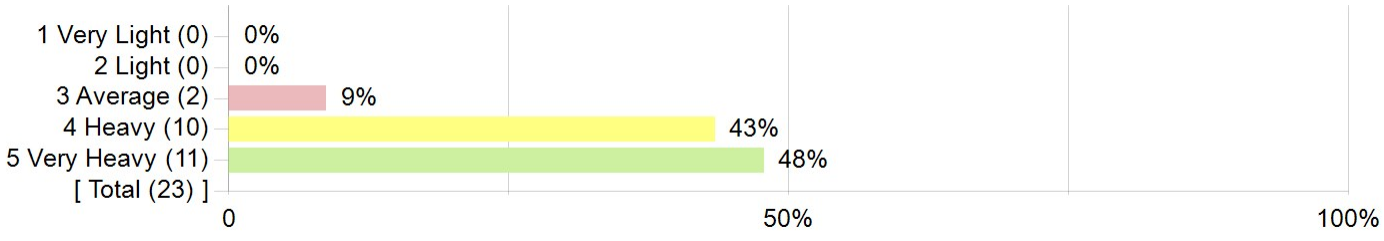
Part B. Divisional Items

The instructor (Amir-massoud Farahmand) generated enthusiasm for learning in the course.



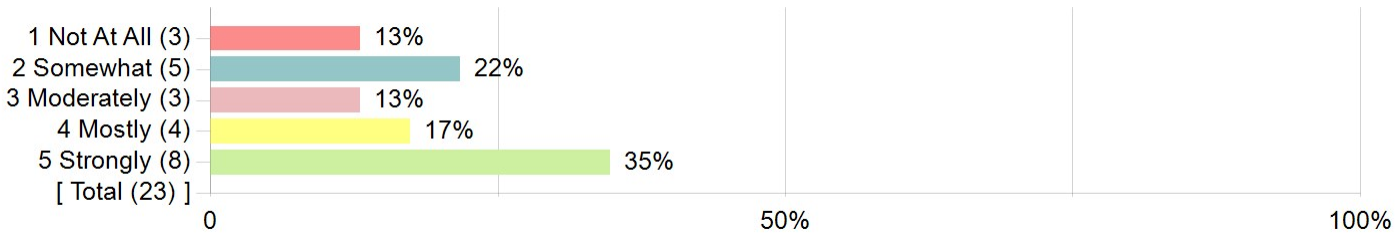
Statistics	Value
Mean	3.9
Median	4.0
Mode	4
Standard Deviation	1.1

Compared to other courses, the workload for this course was...



Statistics	Value
Mean	4.4
Median	4.0
Mode	5
Standard Deviation	0.7

I would recommend this course to other students.



Statistics	Value
Mean	3.4
Median	4.0
Mode	5
Standard Deviation	1.5

Section 3. Comparative Data

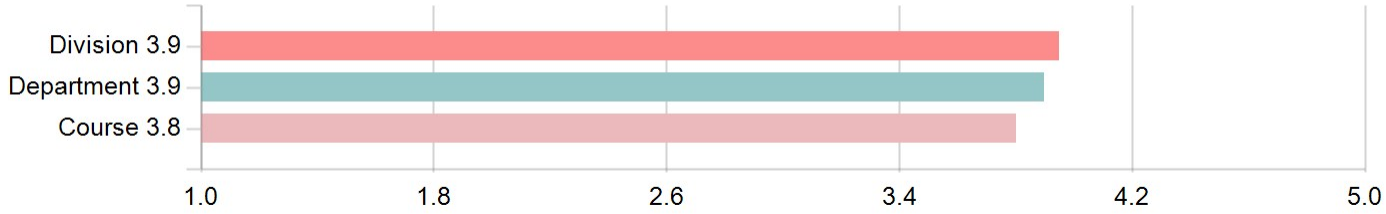
This section provides overall means for given comparators (e.g., division, department) alongside the mean values for a given course. Note that the comparators are calculated by pooling together all individual student survey responses (e.g., student responses for all of the courses in a department are 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 calculator 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 [(3.5x1000)+(4.5x10)]/1010]=3.51 ***and not*** *(3.5+4.5)/2=4.*

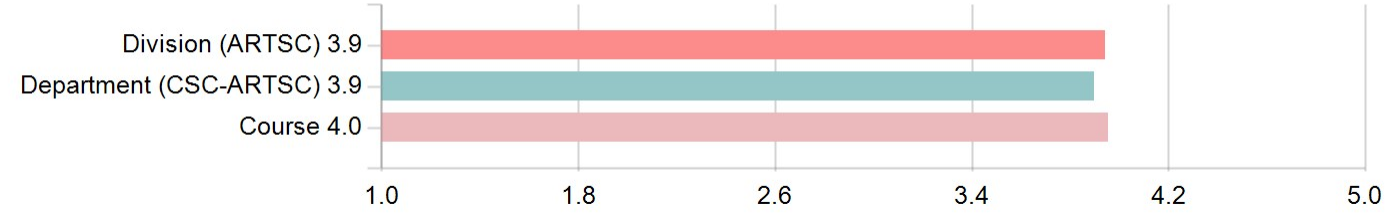
Part A. Core Institutional Items

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

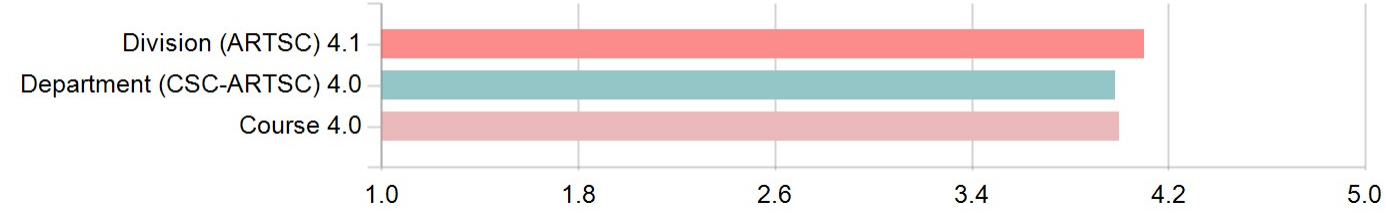
Institutional Composite Mean



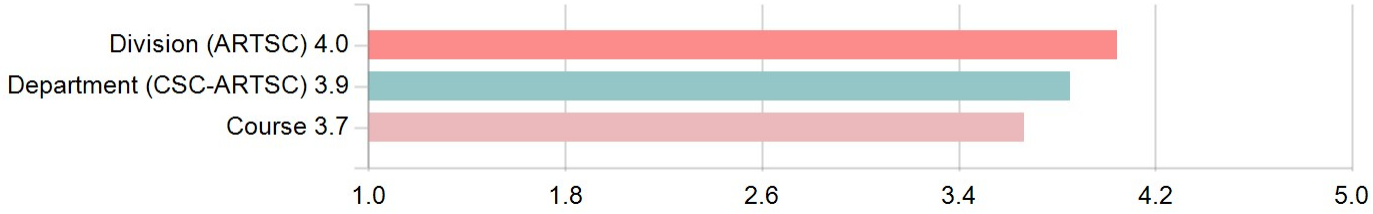
1. I found the course intellectually stimulating.



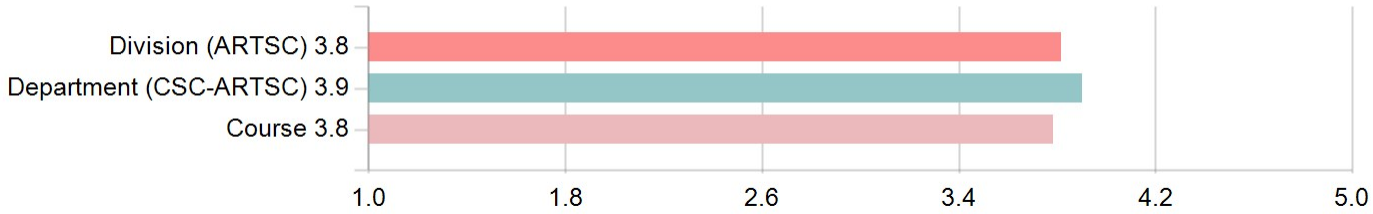
2. The course provided me with a deeper understanding of the subject matter.



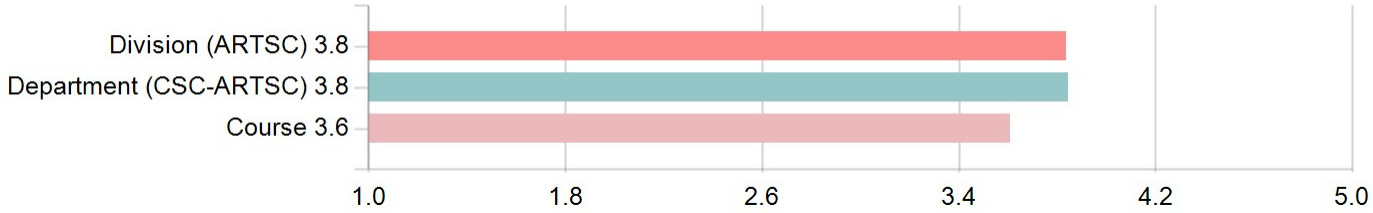
3. The instructor (**Amir-massoud Farahmand**) created an atmosphere that was conducive to my learning.



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

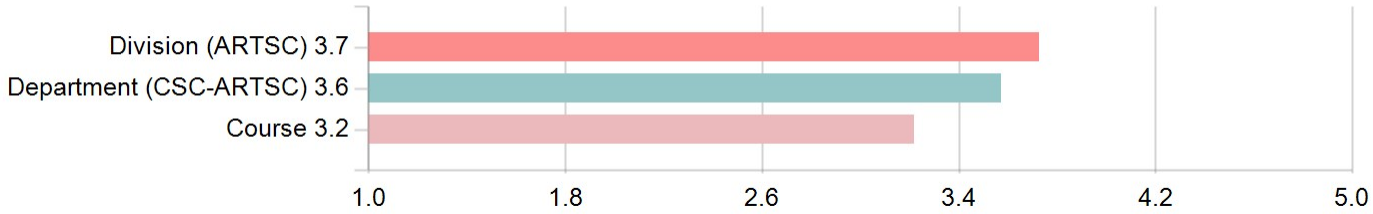


5. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.



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

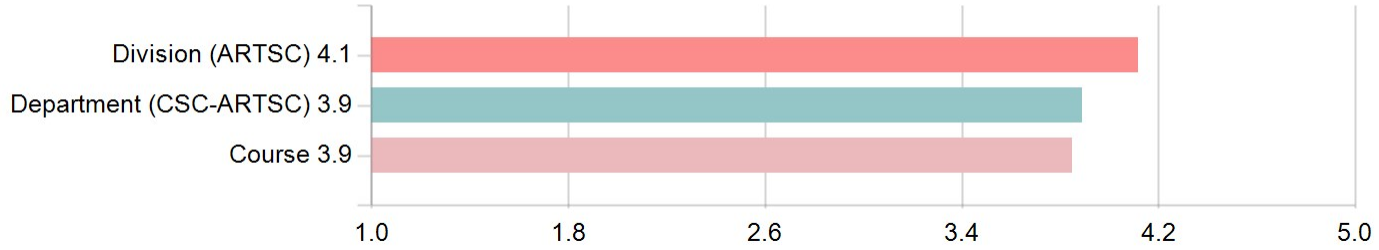
6. Overall, the quality of my learning experience in this course was:



Part B. Divisional Items

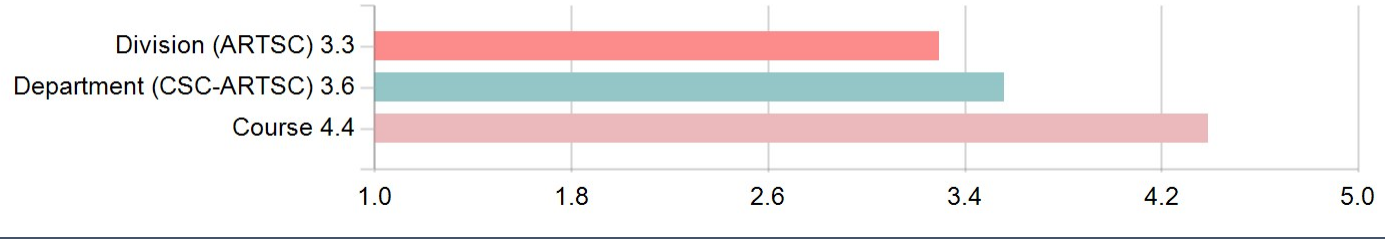
Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

9. The instructor generated enthusiasm for learning in the course.



Scale: 1 - Very Light 2 - Light 3 - Average 4 - Heavy 5 - Very Heavy

10. Compared to other courses, the workload for this course was:



Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - Strongly

11. I would recommend this course to other students.