Section 1 Course Evaluation Executive Summary

Course Name: Analysis II MAT257Y1-Y-LEC0101	**Instructor: Dror Bar-Natan**
Course Code: MAT257Y1	**Section: LEC0101**

FAS Winter 2017 Undergrad

Raters	Students
Responded	56
Invited	92

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.	4.8	5.0
The course provided me with a deeper understanding of the subject matter.	4.8	5.0
The instructor (Dror Bar-Natan) created an atmosphere that was conducive to my learning.	4.5	5.0
Course projects, assignments, tests, and/or exams improved my understanding of the course material.	4.6	5.0
Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.	4.5	5.0
Institutional Composite Mean	4.6	-

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:	4.3	5.0

7. Please comment on the overall quality of the instruction in this course.	See Section 2
8. Please comment on any assistance that was available to support your learning in this course.	See Section 2

Part B. Divisional Items

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

Question	Summary	
	Mean	**Median**
FAS_001 The instructor (Dror Bar-Natan) generated enthusiasm for learning in the course.	4.6	5.0

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

Question	Summary	
	Mean	**Median**
FAS_002 Compared to other courses, the workload for this course was…	4.1	4.0

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

Question	Summary	
	Mean	**Median**
FAS_003 I would recommend this course to other students.	4.2	5.0

Part C: Departmental Items

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

Question	Summary	
	Mean	**Median**
The course instructor (Dror Bar-Natan) explained concepts clearly.	4.3	5.0

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

Question	Summary	
	Mean	**Median**
The course instructor (Dror Bar-Natan) was approachable.	4.2	5.0

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

Question	Summary	
	Mean	**Median**
The course instructor (Dror Bar-Natan) answered questions clearly.	4.5	5.0

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

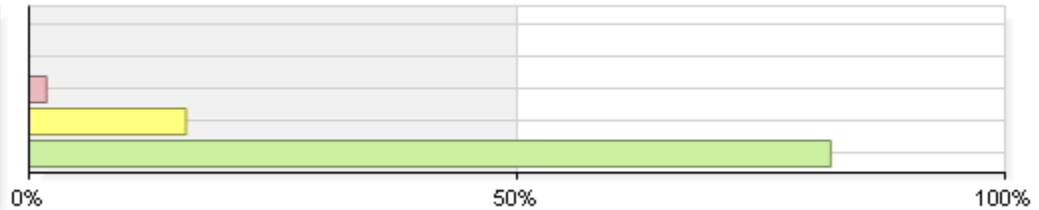| Question	Summary	
	Mean	**Median**
UNIT(OQI) Overall, the quality of instruction provided by (Dror Bar-Natan) in this course was:	4.5	5.0

Section 2 Course Evaluation Details and Summaries
Response Distributions and Associated Statistics

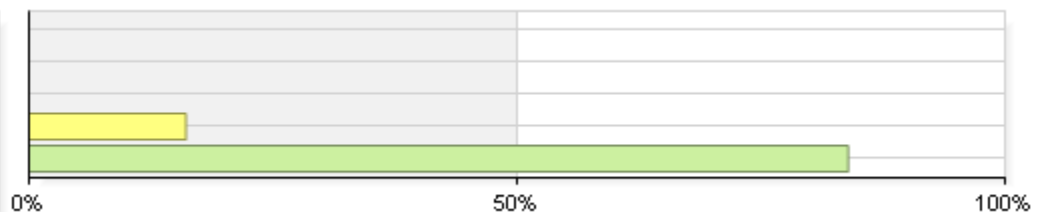## Part A. Institutional Items

1. I found the course intellectually stimulating.

1 Not At All	0	0%
2 Somewhat	0	0%
3 Moderately	1	2%
4 Mostly	9	16%
5 A Great Deal	46	82%
Total	56	

Statistics	Value
Mean	4.8
Median	5.0
Mode	5
Standard Deviation	+/-0.4

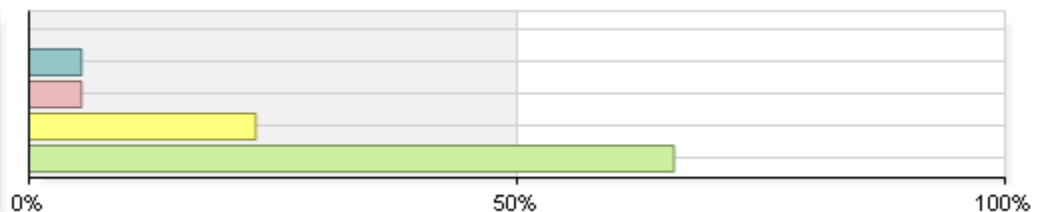### 2. The course provided me with a deeper understanding of the subject matter.

1 Not At All	0	0%
2 Somewhat	0	0%
3 Moderately	0	0%
4 Mostly	9	16%
5 A Great Deal	47	84%
Total	56	

Statistics	Value
Mean	4.8
Median	5.0
Mode	5
Standard Deviation	+/-0.4

3. The instructor (Dror Bar-Natan) created a course atmosphere that was conducive to my learning.
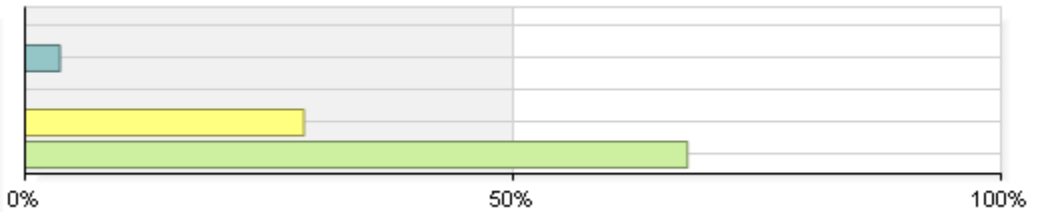
1 Not At All	0	0%
2 Somewhat	3	5%
3 Moderately	3	5%
4 Mostly	13	23%
5 A Great Deal	37	66%
Total	56	

Statistics	Value
Mean	4.5
Median	5.0
Mode	5
Standard Deviation	+/-0.8

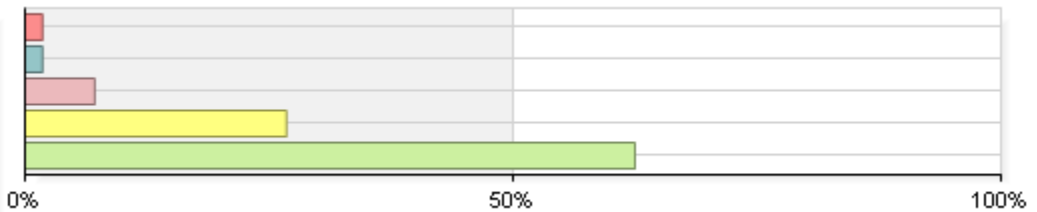## 4. Course projects, assignments, tests and/or exams improved my understanding of the course material.

1 Not At All	0	0%
2 Somewhat	2	4%
3 Moderately	0	0%
4 Mostly	16	29%
5 A Great Deal	38	68%
Total	56	

Statistics	Value
Mean	4.6
Median	5.0
Mode	5
Standard Deviation	+/-0.7

5. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.
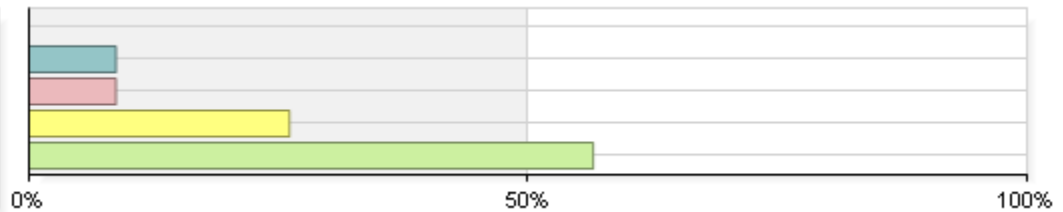
1 Not At All	1	2%
2 Somewhat	1	2%
3 Moderately	4	7%
4 Mostly	15	27%
5 A Great Deal	35	63%
Total	56	

Statistics	Value
Mean	4.5
Median	5.0
Mode	5
Standard Deviation	+/-0.9

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

1 Poor	0	0%
2 Fair	4	9%
3 Good	4	9%
4 Very Good	12	26%
5 Excellent	26	57%
Total	46	

Statistics	Value
Mean	4.3
Median	5.0
Mode	5
Standard Deviation	+/-1.0

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

Comment
The material in this course is very challenging, but the professor managed to present in a fashion that made it unusually intuitive and within reach. This conscientious pedagogical approach created a happy and comfortable atmosphere that really made smoother the experience of distilling many abstract concepts into human-sized pieces.
I enjoyed the material but felt that the instructor did not teach in a way that helped me learn, I found myself just reading the textbook.
This was the most interesting and inspiring course that I have taken at U of T so far. Prof. Bar-Natan always had a clear idea of where and how he was leading the students, always had an interesting and challenging lecture and always followed it by very good assignments; the textbook greatly tied to the course as well.
Dror Bar-Natan is the best professor I've had so far!!!
It was hard to follow. Often I felt the class was disorganized and many key concepts weren't clearly defined. He would use too many analogies and define things in imprecise ways that really did nothing for me at all. When asking questions the professor's responses were often intentionally vague (for instance, asking whether we should review something or not for a quiz). I'd say more than 80% of my learning came from the textbook and very little from lectures and class notes. When asking for help is sometimes unapproachable and not very helpful and sometimes you feel like he doesn't want you around. However, I do appreciate the fact that he is very nice, is often very funny and oftentimes DOES explain things precisely and clearly and in great depth, and I do understand that a lot of the course material is too advanced to go into great and absolute depth since we do have limited time.
Instruction is sometimes quite disorganized and difficult to follow.
Professor Bar-Natan was very skilled at creating a learning environment suited for the difficult topics in this course, and at explaining the concepts clearly and intuitively.
Prof Bar-Natan has been the best lecturer I have ever had. His pace is on point, and he explains the intuition of the material first, which makes the hard stuff very accessible.
Superb, excellent, enthusiastic instruction; great assignments.
Professor Bar-Natan is very knowledgeable. And MAT257 is one of the few math courses I have taken so far that actually get to complete the syllabus without rushing through and skipping. The tests are fair, I think the averages of the class were reasonable. Tests did not take place during regular lecture hours, which gave us sufficient time to do the tests in addition to earning us more time for lectures. This was essentially for the completion of the syllabus. I am very satisfied.
Great!
Very good.
Professor Bar Natan was great. His lectures were good and he was excellent at motivating concepts. The material was challenging, but it was delivered in a way so that the challenge didn't come from poor presentation or organization of the course, unfair or unfairly specific exam questions, or ridiculous tests, but from the math itself. This made the course appealing and fun to work at, and extremely rewarding. The problem sets were challenging but fair and so were the exams. Overall, it was a fantastically planned and excellently delivered course.
Dror's insights into certain topics as well as his intuitive explanation coupled with the textbook made traditionally very difficult to grasp topics extremely digestible!
This is a tough course and I think that our professor did a really good job on motivating our interests of studying this course.
Really good. Lectures were clear and almost always improved my understanding of the material. For the most part the problems covered in the tutorials were interesting ones. Only comment is that the tests could be more challenging.
It is the best professor I ever met, he explained concept so clear, gave us enough intuitive explanations, and taught us interesting riddles. His pronunciation and articulation is so amusing, I really want to take more courses with him.
This course is hard, but not approachable. If you spend a lot of time on it, the result would be too bad.
The motivation and clarity provided by the instructor is unrivalled in all courses I have ever taken. Entertaining and helpful lectures combined with a good textbook and well-designed tests and problem sets made this course an excellent experience.
Very clear and intuitive.
The course was consistently taught very well. With a few minor exceptions, concepts were taught with a strong emphasis on understanding that respected the student's intelligence without moving too quickly. At the same time,

rigour was not neglected except in certain tedious cases, where supplementary reading from the textbook was necessary (and sufficient). Seemingly unapproachable material was carefully built up, and at the end of the course I found myself greatly improved in mathematical maturity as well as in the specifics of the content taught.

The professor clearly had an infectious enthusiasm for mathematics generally (reflected in riddles and other extra content), and was committed to helping to induct the students into the mathematical community, with his forthright commentary on the topics studied ("this is boring but useful," and so on).

He tried really hard to help students understanding the material and I really appreciated it.

The professor taught very well. Other than a few weak parts near the end of general integration, the course was taught really well.

I really really liked this course and Dror was fantastic at making the material exciting and accessible in lecture. Great at answering questions too, and fun riddles.

Even though I am doing well in this course, I learn to think when studying math.

Dror is an excellent teacher. His lectures are always well organized and his homework assignments and tests are extraordinarily clear in the way they are written. He lays out his expectations well and equips us well to meet them - through providing lecture handouts, encouraging classmates to share notes, etc

Professor was good at explaining the general goals/lesson plan for the day before beginning lecture. I liked how he provided motivation for why we were learning the material.

Dror Bar Natan is an amazing professor and a great instructor. His instruction has helped me find passion for mathematics and see analysis in a different light. He truly tries his best to present the material in the most clear, concise, but rigorous way possible.

Dror is very good at making the abstract concepts of the course more intuitive.
He occasionally gets lost at the blackboard, however. It seems he tends to improvise some lectures.

Dror did an amazing job fully rigorously explaining concepts with insightful examples and terminology that eased into formality throughout the year.

The course was taught very well.
A few minor things hindered it somewhat, but not significantly.

Professor Bar - Natan almost always explained concepts in a very clear and concise manner.

Professor Bar-Natan is very enthusiastic about the topics of the course. He tries to keep things entertaining by making jokes and his humour is much appreciated. He explains things clearly and he's very helpful in answering questions during office hours.

Great! The professor encouraged us to think about the material on an intuitive level and to draw connections between various parts of mathematics

Very good and interesting course. Clearly taught.

I found Dror's style to be hard to follow, but I know many people would disagree and absolutely love it. Regardless the textbook was very good and material was very engaging and that is e ough to develop a very good understanding of the course topics throughout the year.

Students with good memorization skills but no understanding of the material were able to do very good on the tests. Tests should be more theoretical.

Very well taught. Challenging but fun class. Lectures were interesting and the professor was fun and engaging.

very good

Lectures were great. Loved the material. Felt that the most important parts were always being stressed.

Professor Bar-Natan is the best professor I've had so far while at UofT. His charisma and passion for the content was a huge motivator to do well. His riddles at the beginning of each lecture and willingness to engage with the students during lecture created a relaxed atmosphere that was very conducive to learning. Given the opportunity I would definitely take a course with him again!

Professor Dror Bar-Natan is great at both explaining things clearly, and making you interested in them. Easily my favourite math professor so far.

The course was taught very well as we were provided with two explanations for many things (one by the professor and one by the textbook) that really helped if one explanation did not make the most sense.

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

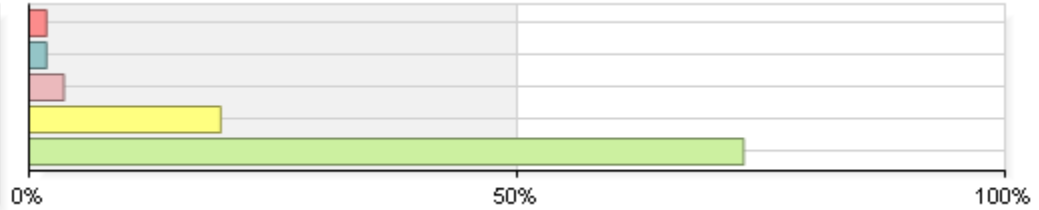| Comment |
| --- |
| The professor's office hours and the TAs for this course were great—deeply informative. |
| Both Teaching Assistants and Prof. Bar-Natan held numerous office hours and were always reachable. |
| My TA Jihad often overcomplicated things and went off topic to principles that weren't related to the course and I often felt intimidated. The last few weeks I decided not to go to his tutorials anymore because I wasn't getting anything out of them and they caused me needless hassle. |
| Professor Bar-Natan provided several resources for assistance in the course, including an online portal where students could share notes, homework solutions, and other resources. As for the tutorials, I could hardly attend any because of a conflict I had with another course. |
| The TA's really impressed me with their willingness to go out of their way to help. |
| TA's were very helpful and approachable. Nothing to complain. |
| The TAs were pretty helpful, most of the time. |
| The tutorials were somewhat lacking but the textbook made up for it. |
| The professor and one of the TAs have office hours every week, as well as extended office hours before the tests. |
| TA are really helpful and patient, Jihad always answer our questions after tutorial. |
| The online website is really helpful for review and community. |
| I found the tutorials to be completely unhelpful. The wiki which was set up by the instructor was an excellent resource which complemented the course's style. This undoubtedly took a large amount of time for the professor to set up and maintain, and it was greatly appreciated by the students. |
| The assistance is very accessible. |
| Office hours by both the professor and the teaching assistants were accessible and helpful. Tutorials themselves pre-empted many of the questions that would otherwise be asked, and were well worth attending. |
| Some of the materials in the lecture are lack of details. |
| There were office hours, and the tutorials were used to elucidate concepts further. |
| Office hours before tests were helpful, generally lectures and textbook reading were sufficient. |
| My TA Jhad always prepared tutorial carefully and helped me so much in my study. I really appreciate all his help. |
| Lots of support was available to me in the form of office hours and TAs, but the majority of the support came from studying together with classmates. These challenging courses really create a supportive community. |
| Office hours and TAs were of great help. |
| I did not go to office hours. I do not know how good the assistance was. |
| Both the Professor and teaching assistants were very available and helpful whenever you had questions. |
| Both the professors and the TAs were available to answer questions and I found them to be very helpful. |
| The professor's office hours were helpful |
| Lots of office hours available with knowledgeable TAs as well as with Dror himself. |
| The textbook was really helpful for clarifying class concepts that were left unclear. |
| very good |
| Prof. Bar-Natan had office hours the night before the test that helped immensely and I would love to see this more often. |
| Both teaching assistants were very helpful. Office hours were held every week by both teaching assistants and the professor. Professor Bar-Natan also provided the students with a course website where additional questions could be resolved. I am very satisfied with the support given throughout. |
| Office hours were readily available and even more hours were added during test weeks. |

Part B. Divisional Items

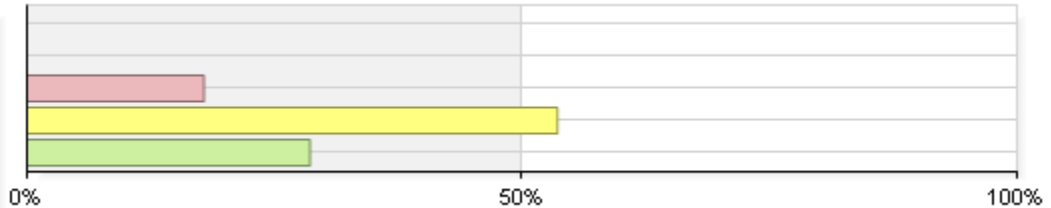## The instructor (Dror Bar-Natan) generated enthusiasm for learning in the course.

1 Not At All	1	2%
2 Somewhat	1	2%
3 Moderately	2	4%
4 Mostly	11	20%
5 A Great Deal	41	73%
Total	56	

Statistics	Value
Mean	4.6
Median	5.0
Mode	5
Standard Deviation	+/-0.8

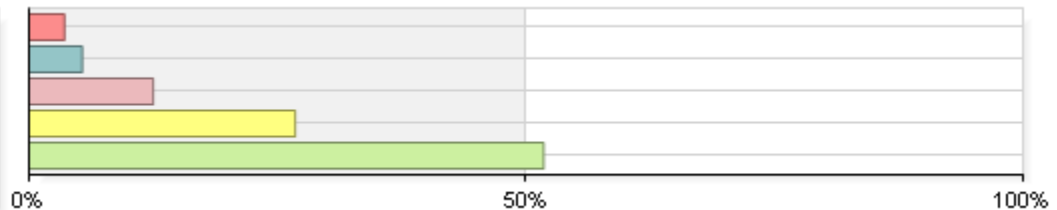## Compared to other courses, the workload for this course was…

1 Very Light	0	0%
2 Light	0	0%
3 Average	10	18%
4 Heavy	30	54%
5 Very Heavy	16	29%
Total	56	

Statistics	Value
Mean	4.1
Median	4.0
Mode	4
Standard Deviation	+/-0.7

I would recommend this course to other students.

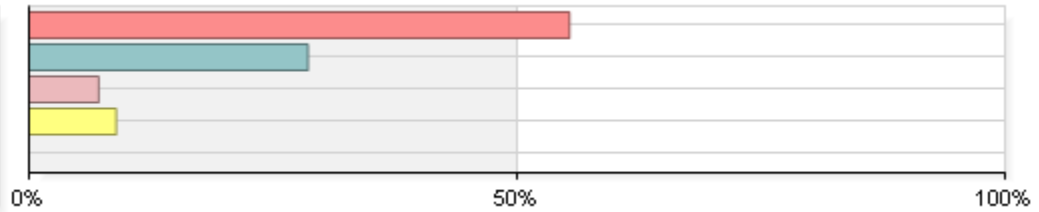|		
1 Not At All	2	4%
2 Somewhat	3	5%
3 Moderately	7	13%
4 Mostly	15	27%
5 Strongly	29	52%
Total	56	

Statistics	Value
Mean	4.2
Median	5.0
Mode	5
Standard Deviation	+/-1.1

Part C. Departmental Items

The course instructor (Dror Bar-Natan) explained concepts clearly.
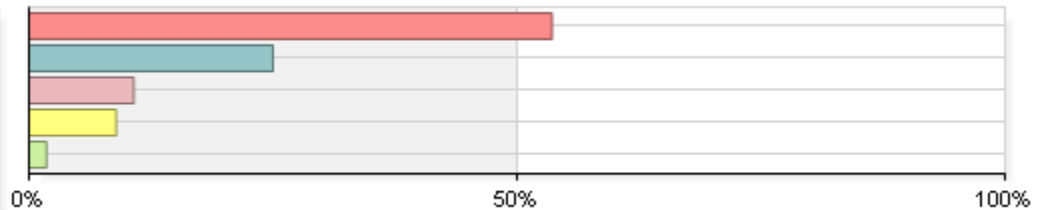
5 A Great Deal	31	55%
4 Mostly	16	29%
3 Moderately	4	7%
2 Somewhat	5	9%
1 Not At All	0	0%
Total	56	

Statistics	Value
Mean	4.3
Median	5.0
Mode	5
Standard Deviation	+/-1.0

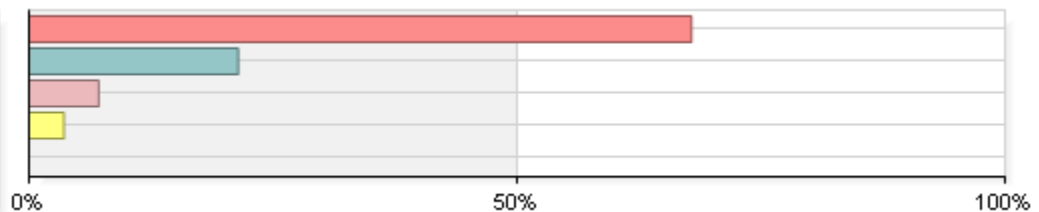## The course instructor (Dror Bar-Natan) was approachable.

5 A Great Deal	30	54%
4 Mostly	14	25%
3 Moderately	6	11%
2 Somewhat	5	9%
1 Not At All	1	2%
Total	56	

Statistics	Value
Mean	4.2
Median	5.0
Mode	5
Standard Deviation	+/-1.1

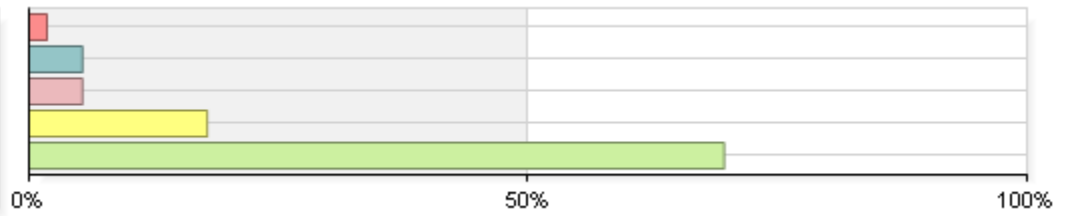## The course instructor (Dror Bar-Natan) answered questions clearly.

5 A Great Deal	38	68%
4 Mostly	12	21%
3 Moderately	4	7%
2 Somewhat	2	4%
1 Not At All	0	0%
Total	56	

Statistics	Value
Mean	4.5
Median	5.0
Mode	5
Standard Deviation	+/-0.8

UNIT(OQI) Overall, the quality of instruction provided by (Dror Bar-Natan) in this course was:

1 Poor	1	2%	
2 Fair	3	5%	
3 Good	3	5%	
4 Very Good	10	18%	
5 Excellent	39	70%	
Total	56		

Statistics	Value
Mean	4.5
Median	5.0
Mode	5
Standard Deviation	+/-1.0

Section 3. Comparative Data
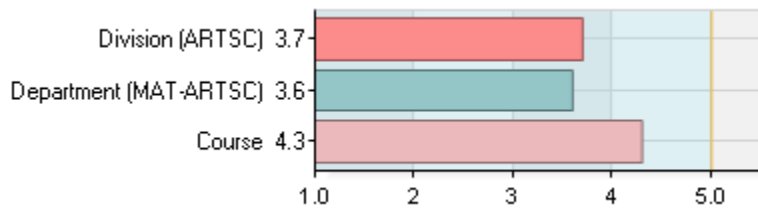
Part A. Core Institutional Items

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

Core Institutional Mean	
	Division (ARTSC) 4.0 Department (MAT-ARTSC) 3.9 Course 4.6
1. I found the course intellectually stimulating.	Division (ARTSC) 4.0 Department (MAT-ARTSC) 3.9 Course 4.8
2. The course provided me with a deeper understanding of the subject matter.	Division (ARTSC) 4.1 Department (MAT-ARTSC) 4.0 Course 4.8
3. The instructor (Dror Bar-Natan) created an atmosphere that was conducive to my learning.	Division (ARTSC) 4.1 Department (MAT-ARTSC) 4.0 Course 4.5
4. Course projects, assignments, tests, and/or exams improved my understanding of the course material.	Division (ARTSC) 3.8 Department (MAT-ARTSC) 3.8 Course 4.6
5. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.	Division (ARTSC) 3.8 Department (MAT-ARTSC) 3.8 Course 4.5

Section 3. Comparative Data (continued)

Scale: 1 - Poor   2 - Fair   3 - Good   4 - Very Good   5 - Excellent
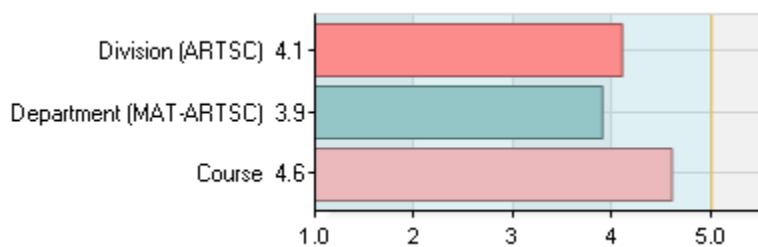
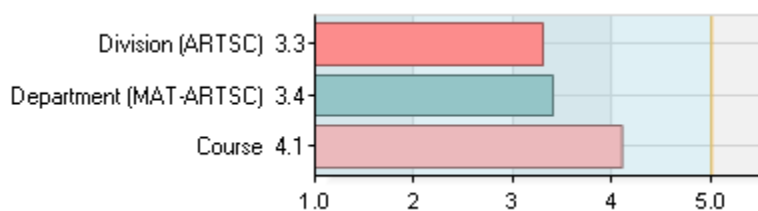| **6. Overall, the quality of my learning experience in this course was:**	

Part B. Divisional Items

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

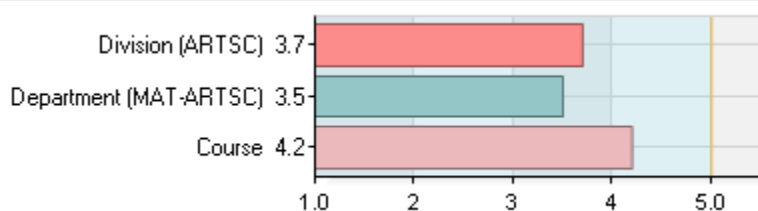| **9. The instructor generated enthusiasm for learning in the course.**	

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

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

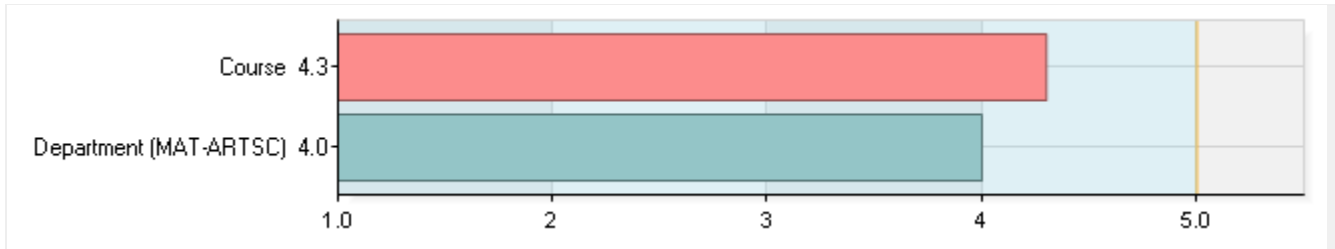**Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - Strongly**

11. I would recommend this course to other students.	

Part C: Departmental Items

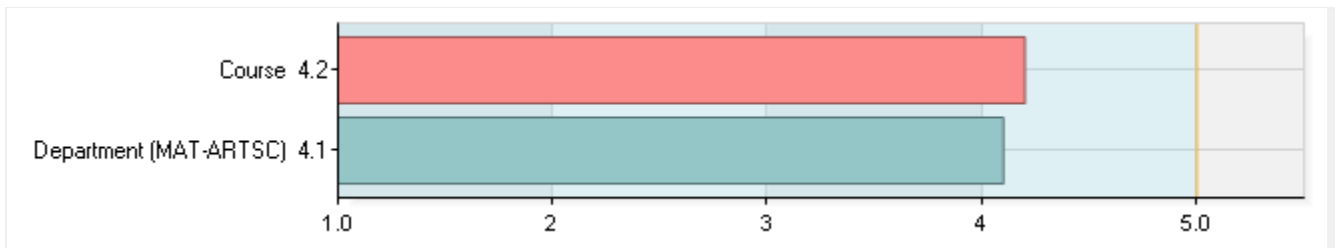## The course instructor (Dror Bar-Natan) explained concepts clearly.

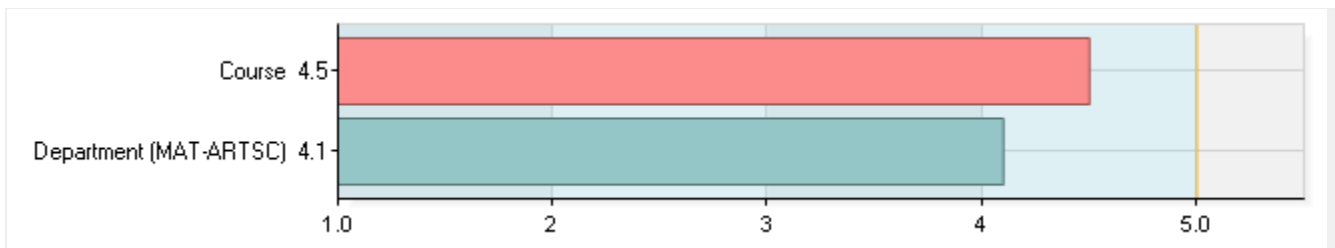**Scale:** 1 - Not At All   2 - Somewhat   3 - Moderately   4 - Mostly   5 - A Great Deal

The course instructor (Dror Bar-Natan) was approachable.

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

The course instructor (Dror Bar-Natan) answered questions clearly.

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

UNIT(OQI) Overall, the quality of instruction provided by (Dror Bar-Natan) in this course was: