

## Section 1 Course Evaluation Executive Summary

Course Name: Intro Combinatorics MAT344H1-F-LEC0101

Instructor: Dror Bar-Natan

Course Code: MAT344H1

Section: LEC0101

### FAS Fall 2015 UG

Raters	Students
Responded	54
Invited	167

### Part A. Core Institutional Items

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

Question	Summary	
	Mean	Standard Deviation
I found the course intellectually stimulating.	4.5	0.7
The course provided me with a deeper understanding of the subject matter.	4.5	0.7
The instructor ( <a href="#">Dror Bar-Natan</a> ) created an atmosphere that was conducive to my learning.	4.6	0.7
Course projects, assignments, tests, and/or exams improved my understanding of the course material.	4.3	0.8
Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.	4.3	0.7
<b>Institutional Composite Mean</b>	4.5	0.7

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

Question	Summary	
	Mean	Standard Deviation
6. Overall, the quality of my learning experience in this course was....	4.2	0.9

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	Standard Deviation
The instructor ( <a href="#">Dror Bar-Natan</a> ) generated enthusiasm for learning in the course.	4.6	0.8

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

Question	Summary	
	Mean	Standard Deviation
Compared to other courses, the workload for this course was...	3.3	0.6

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

Question	Summary	
	Mean	Standard Deviation
I would recommend this course to other students.	4.5	0.8

## Part C: Departmental Items

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

Question	Summary	
	Mean	Standard Deviation
The course instructor ( <a href="#">Dror Bar-Natan</a> ) explained concepts clearly.	4.4	0.8

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

Question	Summary	
	Mean	Standard Deviation
The course instructor ( <a href="#">Dror Bar-Natan</a> ) was approachable.	4.5	0.9

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

Question	Summary	
	Mean	Standard Deviation
The course instructor ( <a href="#">Dror Bar-Natan</a> ) answered questions clearly.	4.4	0.8

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

Question	Summary	
	Mean	Standard Deviation
UNIT(OQI) Overall, the quality of instruction provided by ( <a href="#">Dror Bar-Natan</a> ) in this course was:	4.3	0.9

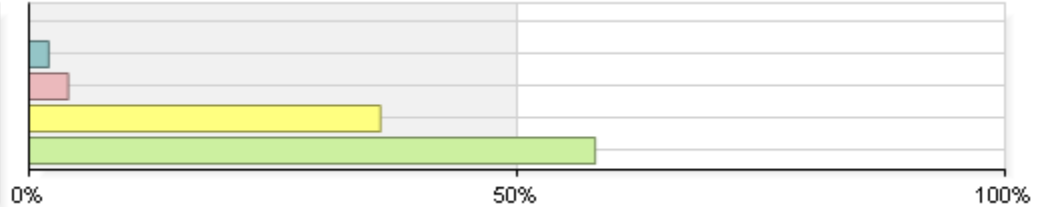
# Section 2 Course Evaluation Details and Summaries

## Response Distributions and Associated Statistics

### Part A. Institutional Items

#### 1. I found the course intellectually stimulating.

1 Not At All	0	0%
2 Somewhat	1	2%
3 Moderately	2	4%
4 Mostly	18	36%
5 A Great Deal	29	58%
Total	50	



Statistics	Value
Mean	4.5
Median	5.0
Mode	5
Standard Deviation	+/-0.7

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

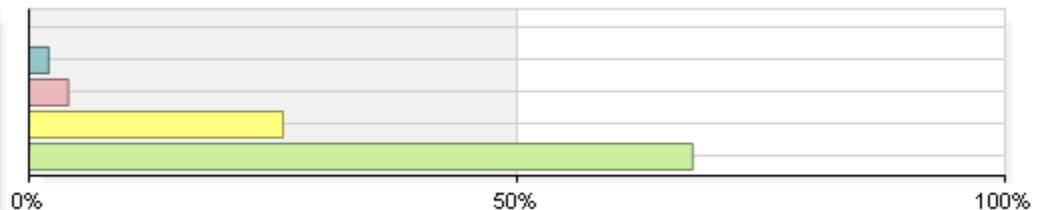
1 Not At All	0	0%
2 Somewhat	1	2%
3 Moderately	2	4%
4 Mostly	16	32%
5 A Great Deal	31	62%
Total	50	



Statistics	Value
Mean	4.5
Median	5.0
Mode	5
Standard Deviation	+/-0.7

#### 3. The instructor (**Dror Bar-Natan**) created a course atmosphere that was conducive to my learning.

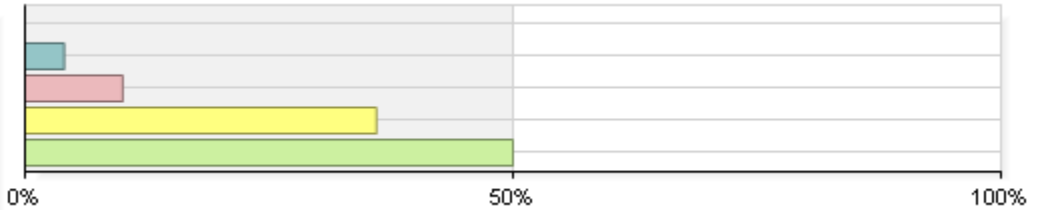
1 Not At All	0	0%
2 Somewhat	1	2%
3 Moderately	2	4%
4 Mostly	13	26%
5 A Great Deal	34	68%
Total	50	



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

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

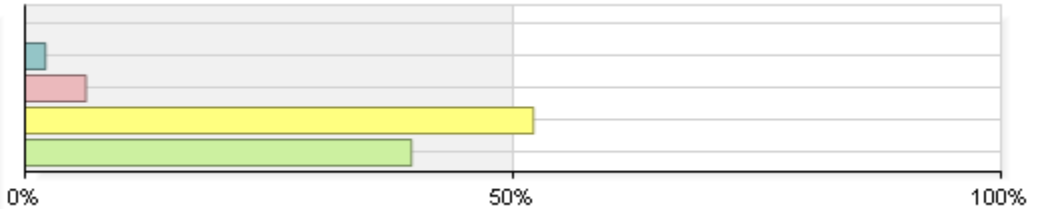
1 Not At All	0	0%
2 Somewhat	2	4%
3 Moderately	5	10%
4 Mostly	18	36%
5 A Great Deal	25	50%
<b>Total</b>	<b>50</b>	



Statistics	Value
Mean	4.3
Median	4.5
Mode	5
Standard Deviation	+/-0.8

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

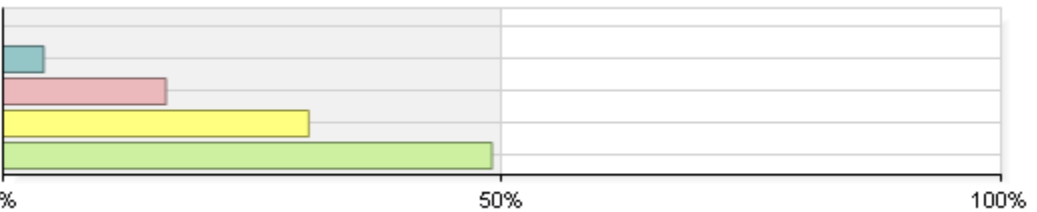
1 Not At All	0	0%
2 Somewhat	1	2%
3 Moderately	3	6%
4 Mostly	25	52%
5 A Great Deal	19	40%
<b>Total</b>	<b>48</b>	



Statistics	Value
Mean	4.3
Median	4.0
Mode	4
Standard Deviation	+/-0.7

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

1 Poor	0	0%
2 Fair	2	4%
3 Good	8	16%
4 Very Good	15	31%
5 Excellent	24	49%
<b>Total</b>	<b>49</b>	



Statistics	Value
Mean	4.2
Median	4.0
Mode	5
Standard Deviation	+/-0.9

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

Comment
very interesting topics and well-structured course with fair evaluations and great teaching
I enjoyed this class very much and would definitely take further courses taught by the professor.
Professor was very enthusiastic and did his best to make lectures helpful and interesting but sometimes did not deliver material as well as possible, and some topics were much more clear when reading the textbook instead of understanding in lecture. However, lectures were definitely helpful and professor was very willing to go over confusing concepts. Tutorials could have been much more useful with another TA or a pre-written set of questions.
This prof provides more insight discrete understanding about the subject. Motivates generally all students into doing better and creates a friendly atmosphere. Generally the best prof in upper level courses.
The course is hard and the assignment homework is even harder than I expected sometimes.
Excellent
Really enjoyed lecture, however the Socratic method Dror tries to implement is only good if you've done the readings ahead of time, which is not always possible. Very clear lecturer, perfect pace, fun proofs, really enjoyed it.
Dror's only downfall through the teaching of the course was that he was too hard on himself.
The instructor was very engaging and had well thought out lectures. I appreciated his use of examples and his efforts to increase student participation during lecture hours.
No need to be surprised at such a high rating 'cause Professor Bar-Natan earns it. His choice of language makes it easy to understand the context, the textbook was wonderfully chosen (this has to be a point since I've seen good profs having students studying an absolutely hideous textbook, thus greatly hindering the success in the course) and his own profound knowledge of the subject makes every course worthwhile and enjoyable. He is a professor with enthusiasm in teaching and cared about his students.
Helpful in introducing the topic to us. A little confusing about some of the enumeration and how to solve problems with it.
Great!
The Professor (Dror Bar-Natan) was extremely comfortable with his material and used good humor in his lectures. This created an atmosphere that helped students learn in his lectures. I thought that the workload of 10 assignments over the semester was a bit too much work for one course. One issue was that in Dror's office hours, he opted to very rarely give students the answer on the homework problems. Even if it was clear that students had made a serious attempt at the problem and run into issues, Dror would not be willing to give a complete or full solution. Instead he often opted to give hints on how to approach this problem. This was sometimes frustrating and made the assignments very difficult.
the Professor is nice and interesting. Class atmosphere was good.
This guy is awesome, my overall appreciation of the course lies partially with the interesting material but I think a large part of why this course was so great was because of the professor. He explained material very clearly and covered an impressive range of topics.
Best course I had this semester. Professor was not only extremely clear in explaining concepts but was also very helpful and approachable. The sequence in which the topics were taught was coherent as well
Professor Bar-Natan has an outstanding ability to capture the interest of his students. Each and every one of the topics discussed in class was presented in such a captivating manner with very interesting examples. His lectures, combined with his unique teaching style, were almost a form of entertainment to me. A job very well done! Dror is the epitome of a good mathematics lecturer.
Classes were almost always engaging and the Prof. encourages participation. Similarly, the TA encourages questions and participation in tutorial.
Professor Dror is very clear and easy to follow. He really does go out of his way to make sure we understand. Possibly the only criticism I would give is that I wish we had focused less on Graph Theory and more on Combinatorics. I am unclear as to why this course would also cover graph theory when there is a course at the same level MAT332 entirely dedicated to the topic.
The class takes a very intuitive approach to combinatorics, and the atmosphere is fun and encourages creative thinking. The instructor presents material clearly, makes connections to application problems, and answers all questions patiently.
The instructor is very smart and funny
Calls was very interesting, but it just seemed to be too closely linked to the text book. (i.e. examples used)

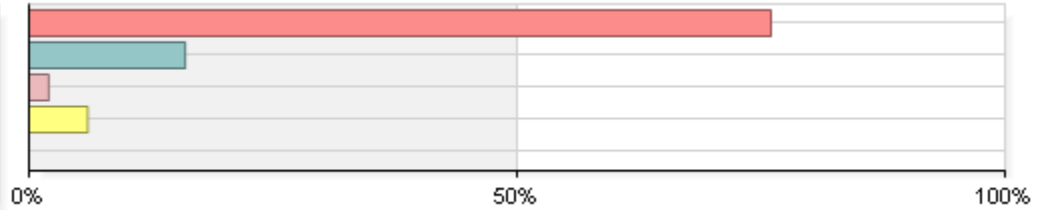
## 8. Please comment on any assistance that was available to support your learning in this course.

Comment
Professor is very helpful in course materials and inspired us to think
tutorials were very helpful and regularly held
The TA, Gaurav Patil, was very helpful, though I believe he'd be better off not worrying about whether the students are participating during tutorial. Even though it doesn't seem like the students have a clue what is happening, I think it's simply that the way the class is set up (stadium seating in a large room) is not conducive to participation. For better or worse, it's easy to go through one's time at university being totally passive and never participating at all; it's not the TA's fault that the university is set up this way. I appreciate that the TA wants to have participation, but when it doesn't happen, there's no need to get upset about it. Just continue carefully presenting the problems and the students will gain by the experience. This situation is really unfortunate; everyone would benefit from more participation. But I think the TA let the lack of participation really bother him, and it became occasionally stressful even to be in tutorial. Nevertheless, I was consistently impressed by how deeply the TA knew the material, and I benefited from his expertise and willingness to help the students. I think he went out of his way to be available for help, and I appreciated it greatly.
Did not attend office hours, tutorials not helpful
I found the beginning of the material challenging intuitively but the meat of the subject was enjoyable.
Unsure, did not use any.
Didn't really use any of it because everything was pretty clear.
The classes in the middle were incredibly constructive because Dror took his time explaining concepts through developing wonderfully on students incorrect ideas.
Gaurav (the TA) is very enthusiastic and eager to go through difficult problems and help students through their doubts.
Tutorials were alright. Sometimes helpful, other times was a little boring
A very interesting math course!
I feel that the TA could have been better prepared for his tutorials as he was often unfamiliar with the material. He often could not answer questions or would take a very long time to derive a full solution. This made tutorials progress very slowly and thus would only help a small number of students at a time.
Teaching assistant is also very good in explaining concepts.
My TA Gaurav was very committed to making sure we understood everything. He did his job incredibly well, and I wish that more of my TA's were like him.
TA and office hours.
A very dedicated T.A.

## Part B. Divisional Items

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

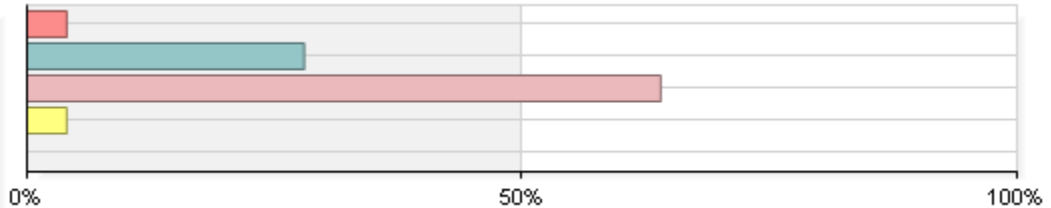
5 A Great Deal	38	76%
4 Mostly	8	16%
3 Moderately	1	2%
2 Somewhat	3	6%
1 Not At All	0	0%
<b>Total</b>	<b>50</b>	



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

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

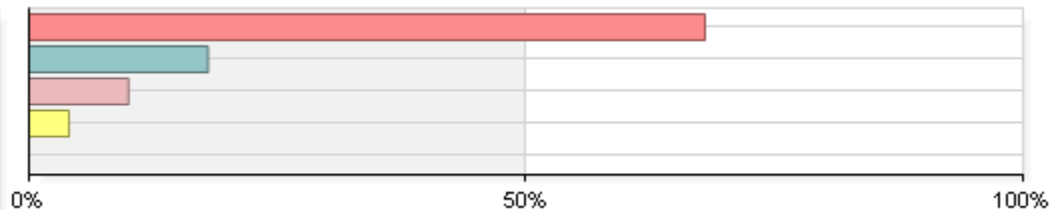
5 Very Heavy	2	4%
4 Heavy	14	28%
3 Average	32	64%
2 Light	2	4%
1 Very Light	0	0%
<b>Total</b>	<b>50</b>	



Statistics	Value
Mean	3.3
Median	3.0
Mode	3
Standard Deviation	+/-0.6

I would recommend this course to other students.

5 Strongly	34	68%
4 Mostly	9	18%
3 Moderately	5	10%
2 Somewhat	2	4%
1 Not At All	0	0%
<b>Total</b>	<b>50</b>	



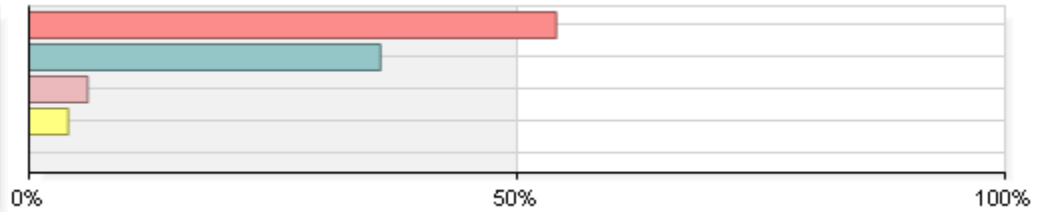
Statistics	Value
Mean	4.5
Median	5.0
Mode	5
Standard Deviation	+/-0.8



## Part C. Departmental Items

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

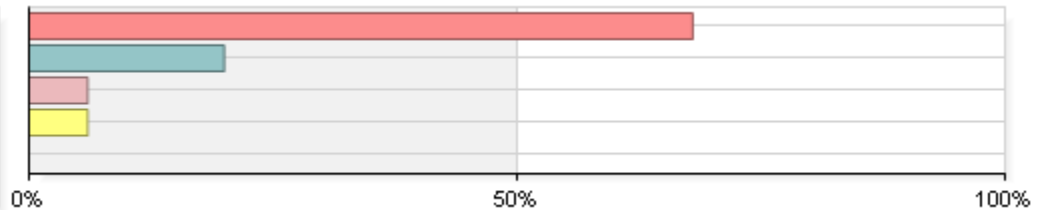
5 A Great Deal	27	54%
4 Mostly	18	36%
3 Moderately	3	6%
2 Somewhat	2	4%
1 Not At All	0	0%
<b>Total</b>	<b>50</b>	



Statistics	Value
Mean	4.4
Median	5.0
Mode	5
Standard Deviation	+/-0.8

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

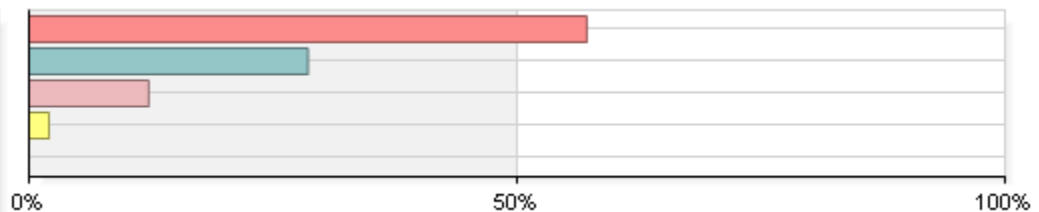
5 A Great Deal	34	68%
4 Mostly	10	20%
3 Moderately	3	6%
2 Somewhat	3	6%
1 Not At All	0	0%
<b>Total</b>	<b>50</b>	



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

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

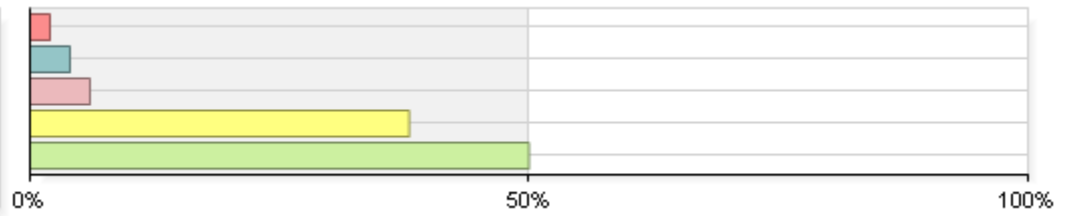
5 A Great Deal	28	57%
4 Mostly	14	29%
3 Moderately	6	12%
2 Somewhat	1	2%
1 Not At All	0	0%
<b>Total</b>	<b>49</b>	



Statistics	Value
Mean	4.4
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	2	4%
3 Good	3	6%
4 Very Good	19	38%
5 Excellent	25	50%
Total	50	



Statistics	Value
Response Count	50
Mean	4.3
Median	4.5
Mode	5
Standard Deviation	+/-0.9

## Section 3. Comparative Data

### Part A. Core Institutional Items

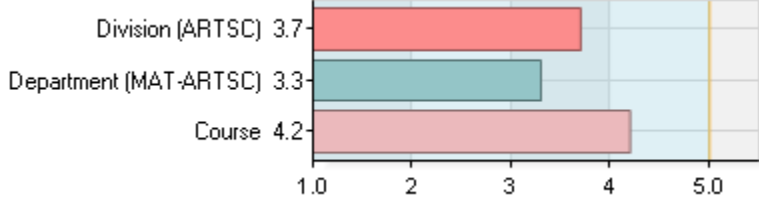
Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal



### Section 3. Comparative Data (continued)

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

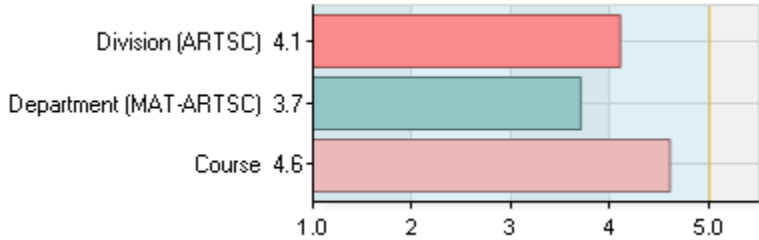
**6. Overall, the quality of my learning experience in this course was:**



#### Part B. Divisional Items

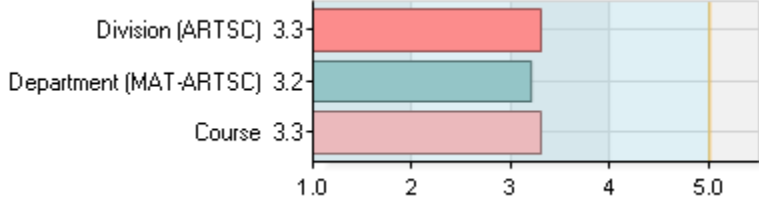
Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

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



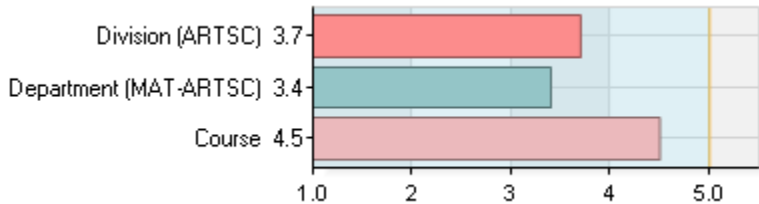
Scale: 1 - Very Light 2 - Light 3 - Average 4 - Heavy 5 - Very Heavy

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



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

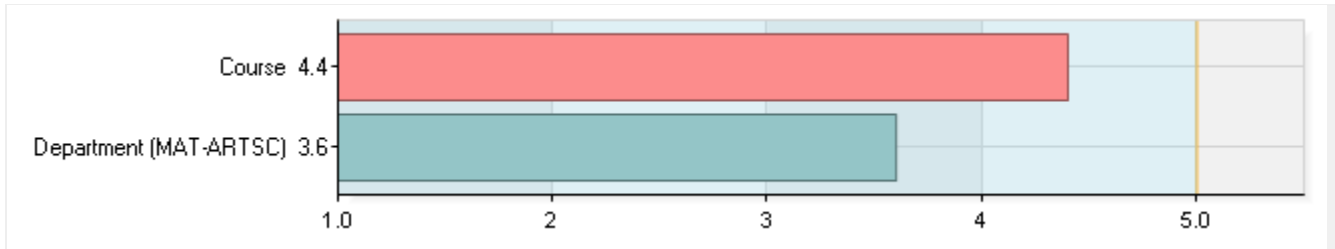
**11. I would recommend this course to other students.**



## Part C: Departmental Items

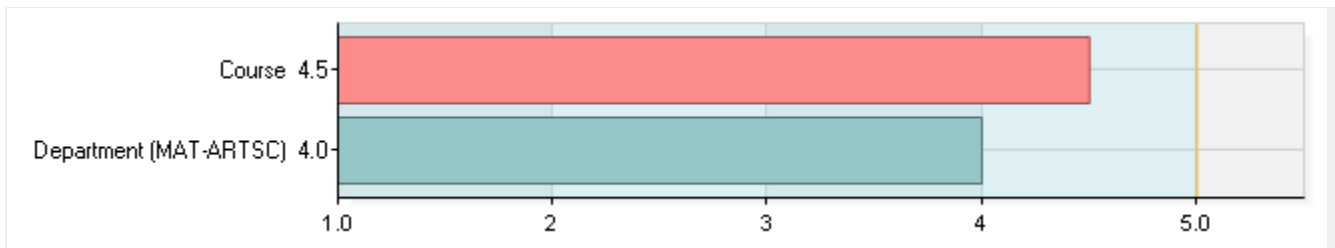
The course instructor (**Dror Bar-Natan**) explained concepts clearly.

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



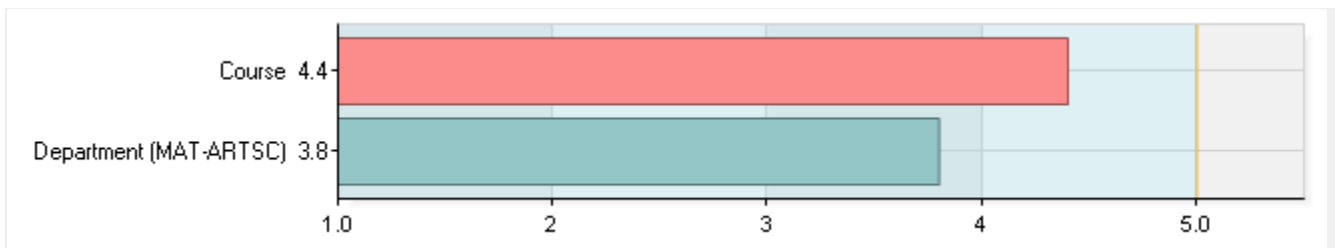
The course instructor (**Dror Bar-Natan**) was approachable.

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:

