

**COURSE REPORT
SET THEORY 7.5 HEC
LOG121, 2020**

- Main instructor/examiner: Fredrik Engström

REGISTRATIONS AND RESULTS

- 21 students (15 programme students, 5 free standing and 1 Erasmus student) registered for the course, of which 6 canceled the registration.
- 12 students took the exam (VG/G/U: 5/3/4),
- 5 the resit exam (0/3/2).
- In total, 11 students (7 programme, 3 free standing and 1 Erasmus student) passed the course, of which 5 passed with distinction.
- The student completion rate (“genomströmningen”) was 53 %.

INTRODUCTORY REMARKS

The course is given both as part of the first semester of the Master Programme in Logic as well as a free standing course. This was the third time the course was given, this time with a new course code since the prerequisites were changed. Compared to the 2019 edition of the course we had also complemented with more prerecorded video lectures and more online material taken from the distance course Introduction to Set Theory (LOG010).

The course is based on the book by Goldrei, but starting from chapter 4 of Goldrei and only including parts of chapter 2 and 3. Due to the pandemic about half of the students attended lectures in the classroom and half of the group using Zoom. With this hybrid model there's a risk that the lecturer focuses mostly on the students present physically in the classroom and that the students attending over Zoom do not get as involved in the discussions and questions.

STUDENTS' ASSESSMENTS

Seven out of 23 students completed the anonymous web based course evaluation. Several reminders were sent out. All registered students were invited to a course conference in May where teachers and students together summarized the result of the survey. Most students were satisfied with the course on the whole, but with some exceptions. A number of student comments are listed or summarized below.

- (1) “Sometimes the structure of the lectures didn't match the structure of the book which was a little confusing”
- (2) “What I felt that the lectures lacked was a sense of a broad overview of how we were going to approach the subject.”
- (3) “All lectures were great and very informative and helpful. However, there could have been more focus on exercises and working together on harder problems.”

- (4) "The detail and effort of the video feedback was hugely appreciated by myself and all other students I spoke to. It showed that the lecturers were willing to go above and beyond to help students and it also provides far more feedback than written comments."
- (5) "This is one of the best-organised courses that I've ever taken. [...] Consistently excellent."
- (6) "It would be nice if we would have more moments throughout the course (hand-in exercises of any kind) where we had a chance to receive feedback,"
- (7) "Send out prerequisite reading during the summer/before the course starts so everyone has the chance to immediately begin on the same page,"
- (8) "increase the number of exercise hand-ins"
- (9) In general many students wished more focus on exercises and feedback on solutions.

SUGGESTIONS FOR CHANGES

Some possible *possible* changes are listed below. These will be discussed with the group of teachers and some may be implemented for the fall 2021.

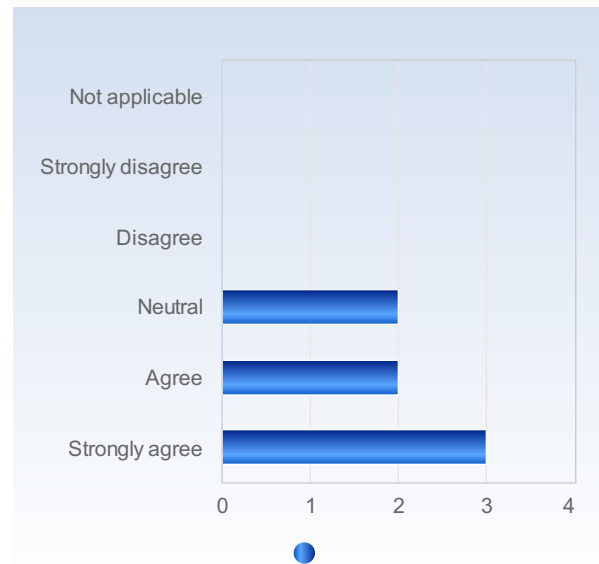
- (1) Change the literature to the Open Logic Project book on set theory. This would make a slight switch to focus more on a broader, and more philosophical, picture as well as motivating the axioms better. However, it would also mean less exercises and that needs to be dealt with.
- (2) A few more sessions should focus on problem solving and exercises complemented with more hand-ins (that could be marked and commented by fellow students).

LOG111 2020 Course Evaluation

Respondents: 23
Answer Count: 7
Answer Frequency: 30,43 %

With the course's intended learning outcomes in mind, I found that teaching during the course was helpful to fulfill the course objectives.

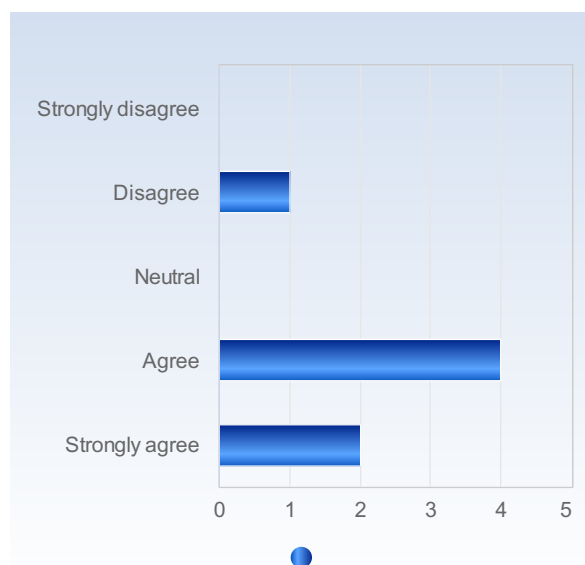
	Number of responses	Cumulated responses
Strongly agree	3 (42,9%)	3 (42,9%)
Agree	2 (28,6%)	5 (71,4%)
Neutral	2 (28,6%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Not applicable	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
	1,9	0,9	48,4 %	1,0	1,0	2,0	2,5	3,0

The literature was relevant to the course content and helped me to achieve the intended learning outcomes.

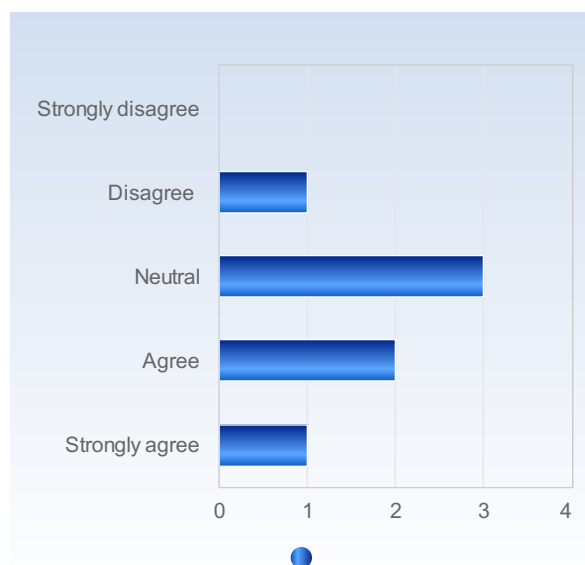
	Number of responses	Cumulated responses
Strongly agree	2 (28,6%)	2 (28,6%)
Agree	4 (57,1%)	6 (85,7%)
Neutral	0 (0,0%)	6 (85,7%)
Disagree	1 (14,3%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
	2,0	1,0	50,0 %	1,0	1,5	2,0	2,0	4,0

The examination(s) in the course corresponded well to the course content.

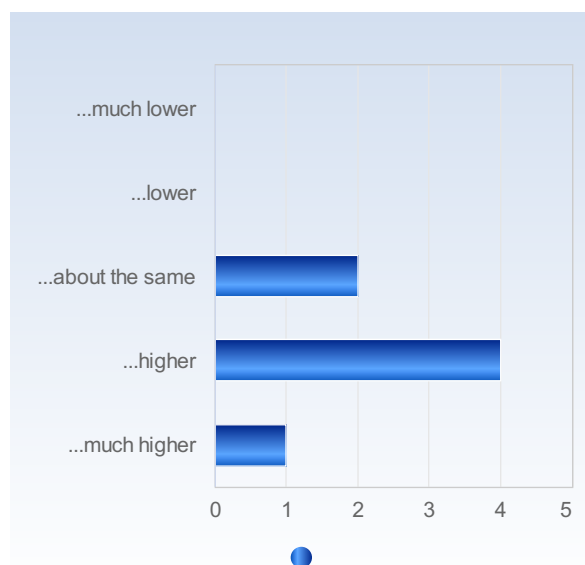
	Number of responses	Cumulated responses
Strongly agree	1 (14,3%)	1 (14,3%)
Agree	2 (28,6%)	3 (42,9%)
Neutral	3 (42,9%)	6 (85,7%)
Disagree	1 (14,3%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
	2,6	1,0	38,0 %	1,0	2,0	3,0	3,0	4,0

In relation to other courses I have taken, the level of difficult in this course was...

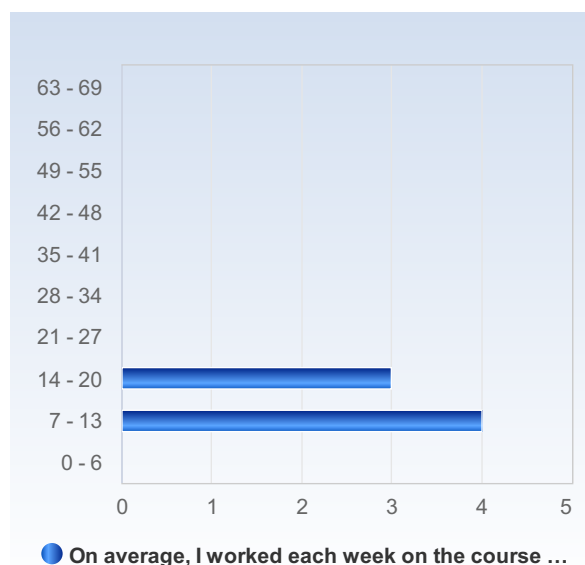
	Number of responses	Cumulated responses
...much higher	1 (14,3%)	1 (14,3%)
...higher	4 (57,1%)	5 (71,4%)
...about the same	2 (28,6%)	7 (100,0%)
...lower	0 (0,0%)	7 (100,0%)
...much lower	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
	2,1	0,7	32,2 %	1,0	2,0	2,0	2,5	3,0

On average, I worked each week on the course for...

On average, I worked each week on the course for...	Number of responses	Cumulated responses
0 - 6	0 (0,0%)	0 (0,0%)
7 - 13	4 (57,1%)	4 (57,1%)
14 - 20	3 (42,9%)	7 (100,0%)
21 - 27	0 (0,0%)	7 (100,0%)
28 - 34	0 (0,0%)	7 (100,0%)
35 - 41	0 (0,0%)	7 (100,0%)
42 - 48	0 (0,0%)	7 (100,0%)
49 - 55	0 (0,0%)	7 (100,0%)
56 - 62	0 (0,0%)	7 (100,0%)
63 - 69	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)

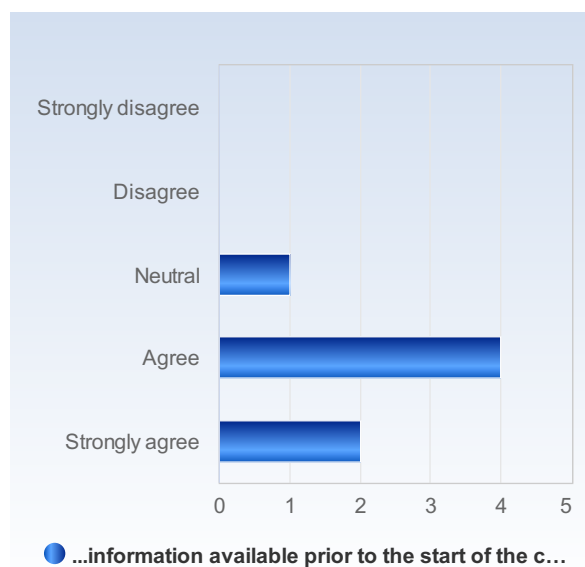


● On average, I worked each week on the course ...

	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
On average, I worked each week on the course for...	12,9	3,9	30,6 %	10,0	10,0	10,0	15,0	20,0

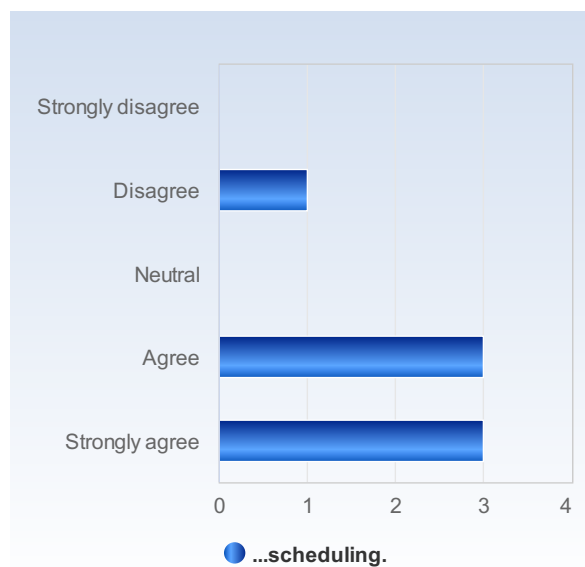
Administration during the course functioned well in terms of...

...information available prior to the start of the course.	Number of responses	Cumulated responses
Strongly agree	2 (28,6%)	2 (28,6%)
Agree	4 (57,1%)	6 (85,7%)
Neutral	1 (14,3%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



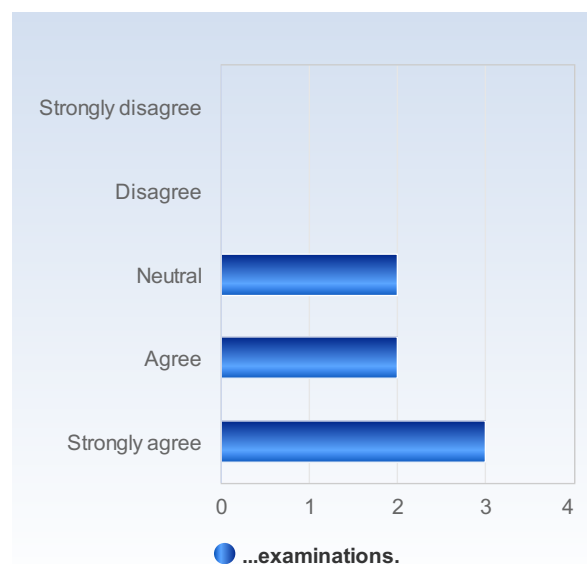
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...information available prior to the start of the course.	1,9	0,7	37,2 %	1,0	1,5	2,0	2,0	3,0

...scheduling.	Number of responses	Cumulated responses
Strongly agree	3 (42,9%)	3 (42,9%)
Agree	3 (42,9%)	6 (85,7%)
Neutral	0 (0,0%)	6 (85,7%)
Disagree	1 (14,3%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...scheduling.	1,9	1,1	57,6 %	1,0	1,0	2,0	2,0	4,0

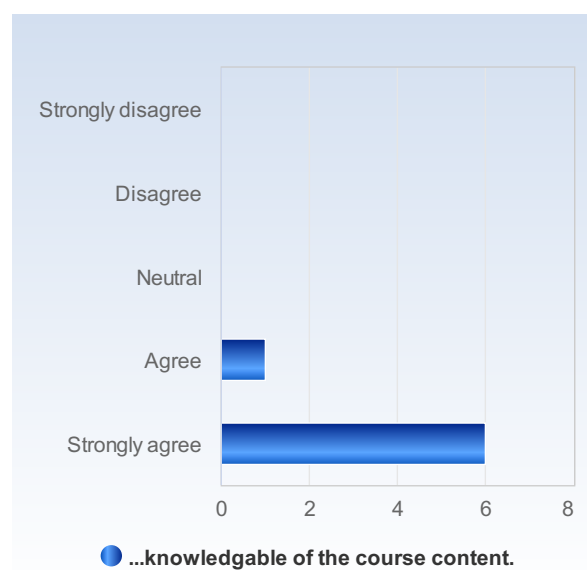
...examinations.	Number of responses	Cumulated responses
Strongly agree	3 (42,9%)	3 (42,9%)
Agree	2 (28,6%)	5 (71,4%)
Neutral	2 (28,6%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



...examinations.	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...examinations.	1,9	0,9	48,4 %	1,0	1,0	2,0	2,5	3,0

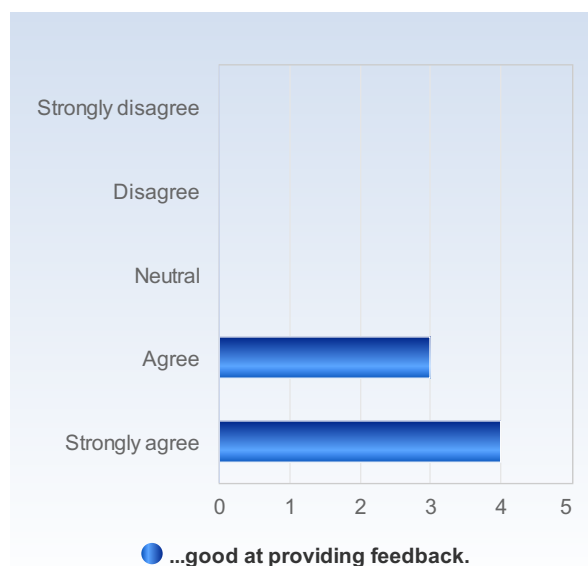
Course teachers were...

...knowledgable of the course content.	Number of responses	Cumulated responses
Strongly agree	6 (85,7%)	6 (85,7%)
Agree	1 (14,3%)	7 (100,0%)
Neutral	0 (0,0%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



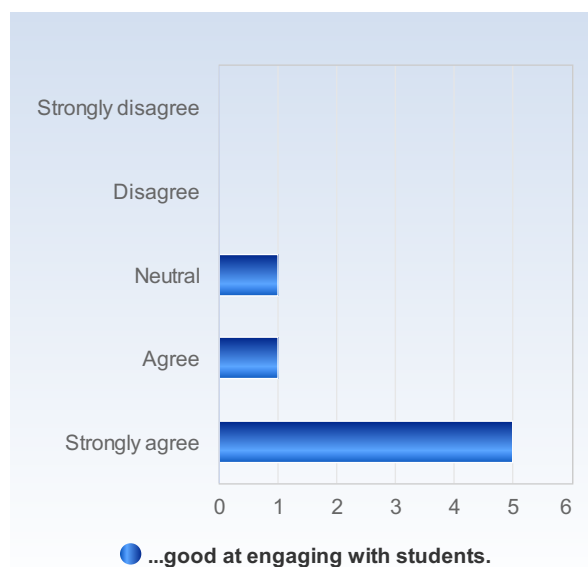
...knowledgable of the course content.	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...knowledgable of the course content.	1,1	0,4	33,1 %	1,0	1,0	1,0	1,0	2,0

...good at providing feedback.	Number of responses	Cumulated responses
Strongly agree	4 (57,1%)	4 (57,1%)
Agree	3 (42,9%)	7 (100,0%)
Neutral	0 (0,0%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



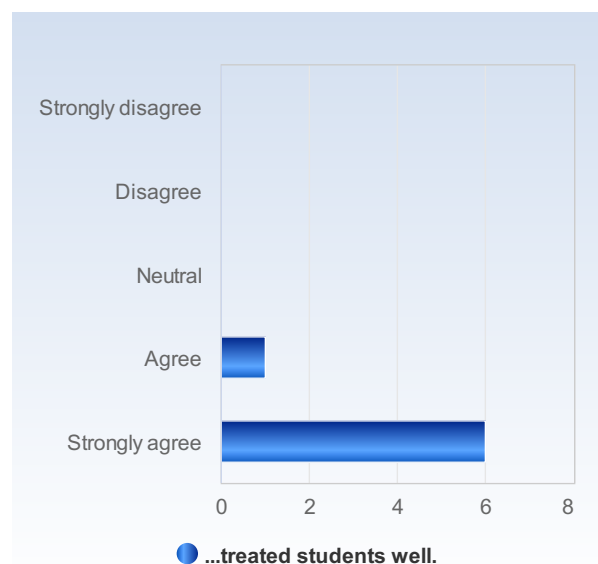
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...good at providing feedback.	1,4	0,5	37,4 %	1,0	1,0	1,0	2,0	2,0

...good at engaging with students.	Number of responses	Cumulated responses
Strongly agree	5 (71,4%)	5 (71,4%)
Agree	1 (14,3%)	6 (85,7%)
Neutral	1 (14,3%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



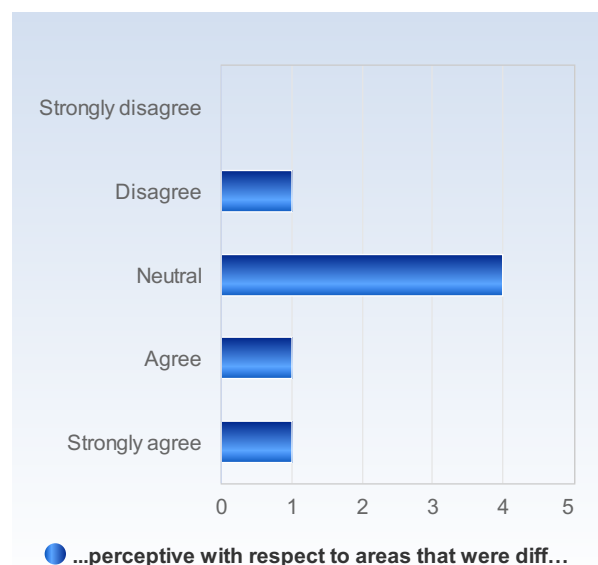
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...good at engaging with students.	1,4	0,8	55,1 %	1,0	1,0	1,0	1,5	3,0

...treated students well.	Number of responses	Cumulated responses
Strongly agree	6 (85,7%)	6 (85,7%)
Agree	1 (14,3%)	7 (100,0%)
Neutral	0 (0,0%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



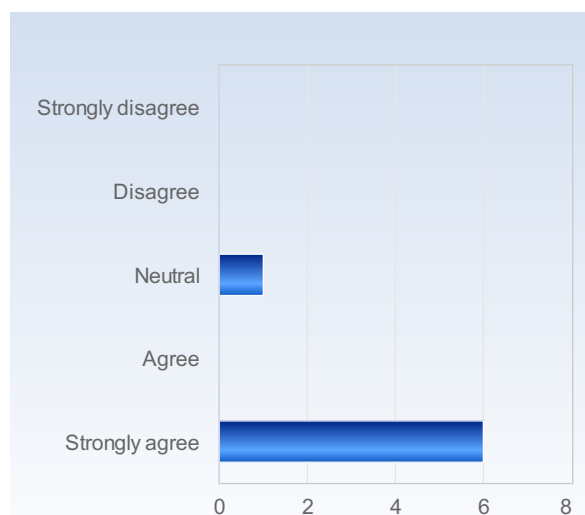
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...treated students well.	1,1	0,4	33,1 %	1,0	1,0	1,0	1,0	2,0

...perceptive with respect to areas that were difficult for students to understand.	Number of responses	Cumulated responses
Strongly agree	1 (14,3%)	1 (14,3%)
Agree	1 (14,3%)	2 (28,6%)
Neutral	4 (57,1%)	6 (85,7%)
Disagree	1 (14,3%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...perceptive with respect to areas that were difficult for students to understand.	2,7	1,0	35,0 %	1,0	2,5	3,0	3,0	4,0

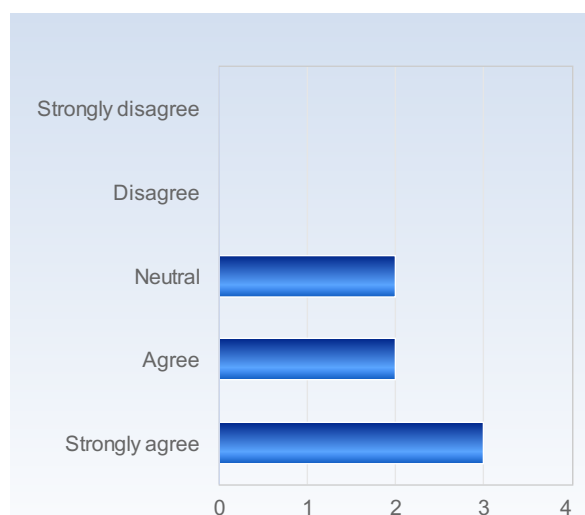
...positively inclined towards having a dialogue with students.	Number of responses	Cumulated responses
Strongly agree	6 (85,7%)	6 (85,7%)
Agree	0 (0,0%)	6 (85,7%)
Neutral	1 (14,3%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



● ...positively inclined towards having a dialogue ...

	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...positively inclined towards having a dialogue with students.	1,3	0,8	58,8 %	1,0	1,0	1,0	1,0	3,0

...available enough for answering questions and addressing concerns.	Number of responses	Cumulated responses
Strongly agree	3 (42,9%)	3 (42,9%)
Agree	2 (28,6%)	5 (71,4%)
Neutral	2 (28,6%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)

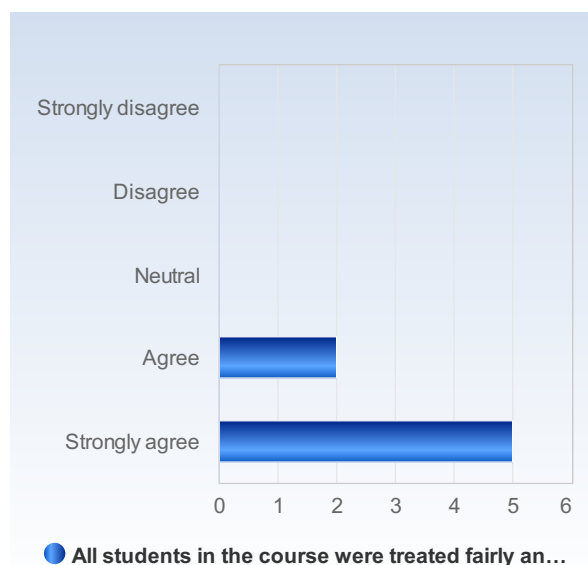


● ...available enough for answering questions an...

	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...available enough for answering questions and addressing concerns.	1,9	0,9	48,4 %	1,0	1,0	2,0	2,5	3,0

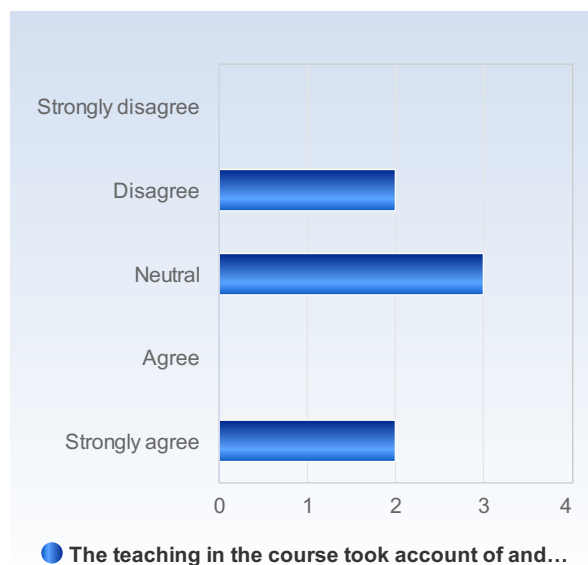
Equal treatment:

All students in the course were treated fairly and equally.	Number of responses	Cumulated responses
Strongly agree	5 (71,4%)	5 (71,4%)
Agree	2 (28,6%)	7 (100,0%)
Neutral	0 (0,0%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
All students in the course were treated fairly and equally.	1,3	0,5	38,0 %	1,0	1,0	1,0	1,5	2,0

The teaching in the course took account of and valued students' different experiences and perspectives.	Number of responses	Cumulated responses
Strongly agree	2 (28,6%)	2 (28,6%)
Agree	0 (0,0%)	2 (28,6%)
Neutral	3 (42,9%)	5 (71,4%)
Disagree	2 (28,6%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The teaching in the course took account of and valued students' different experiences and perspectives.	2,7	1,3	46,2 %	1,0	2,0	3,0	3,5	4,0