

COURSE REPORT
LOGICAL THEORY 15 HEC
LOG111, 2020

- Main instructor/examiner: Fredrik Engström
- Other instructors: Graham Leigh, Rasmus Blanck

REGISTRATIONS AND RESULTS

- 21 students (15 programme, 6 free standing and 1 rereg students) registered for the course, of which 4 canceled the registration.
- 11 students took the first exam (VG/G/U: 3/4/4),
- 9 the second exam (5/2/2),
- 4 the resit of the first part (0/3/1) and
- 2 the resit of the second part (0/1/1).
- In total, 8 students (5 programme and 3 free standing) passed the whole 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 exercises and extra exercise sessions.

The course is divided into two parts: Completeness and Advanced topics. Both parts were lectured by the instructors using a special remix of the Open Logic Textbook as the main book. The lectures were complemented by hand-in problems, exercise sessions and review sessions. Due to the pandemic about half of the students attended lectures in the classroom and half of the group using Zoom, except for the last weeks when we had to cancel the campus session and only have virtual meetings over 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 the following specific exceptions:

Date: May 19, 2021.

- (1) Exercises. More exercises should be made available for the students, both at an easy level and at a more advanced level testing the students' problem solving capabilities.
- (2) Exam. The first exam was too hard and the students were not prepared for the form of the exam and the level of the problems.
- (3) Philosophical perspectives. Some students wanted more philosophical perspectives on the content in the course.
- (4) Students participating over Zoom. The students that participated found hard to be integrated as a group.

SUGGESTIONS FOR CHANGES

In the discussions with the students the following *possible* changes were proposed. These will be discussed with the group of teachers and some may be implemented for the fall 2021.

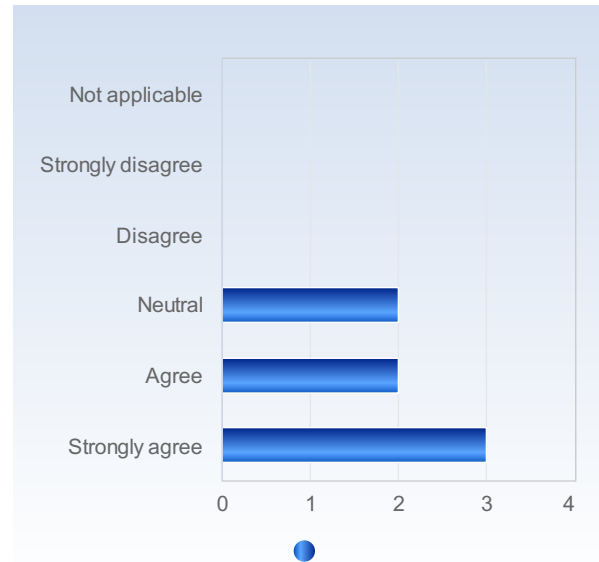
- (1) Update the book with more exercises. Take exercises from old exams as well as from other courses and sources.
- (2) Use a model of peer reviewing the hand-in problems. Students mark and comments on other fellow students' solutions. This is both a opportunity for the marking student to learn the material better and it will free up time for the lecturer.
- (3) Be explicit about which exercises should be dealt with at each exercise session so that students more easily can prepare for the sessions.
- (4) Try different methods to get the students participating over Zoom to be more active and involved. An idea: use breakout rooms for discussions and let the students lead problem solving sessions in smaller groups. Not clear how this could be implemented with a physical group and one over zoom and the lecturer "walking" between the groups.
- (5) Think about the possibility to mark some problems on the exam as G-problems and others as VG-problems to overcome the feeling that the exam is too difficult and stress that the harder problem solving questions on the exam is for VG.
- (6) Be more explicit about the reasons for including the different topics in the second half of the course and include pointers to further reading.
- (7) Think through the layout of the first semester of the programme – would it be possible to include a "philosophy of logic" course that is studied in parallel with the logical theory course?

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.

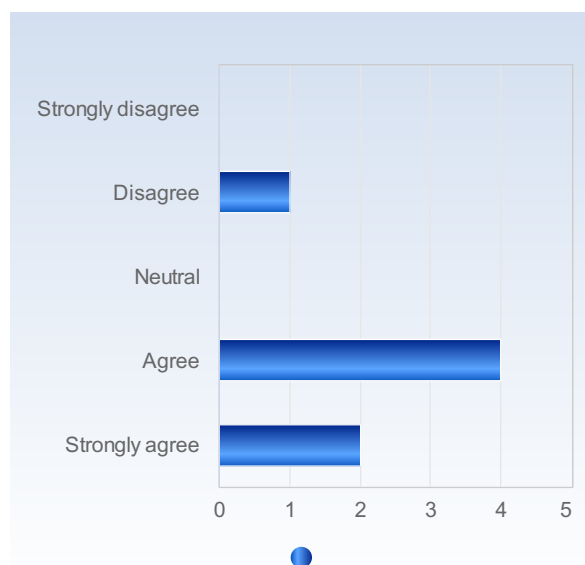
	Number of responses	Cumulated responses
Strongly agree	3 (42,9%)	3 (42,9%)
Agree	2 (28,6%)	5 (71,4%)
Neutral	2 (28,6%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Not applicable	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



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.

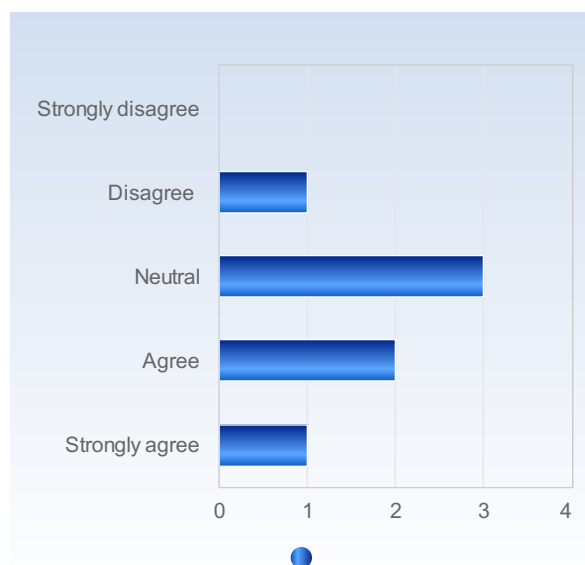
	Number of responses	Cumulated responses
Strongly agree	2 (28,6%)	2 (28,6%)
Agree	4 (57,1%)	6 (85,7%)
Neutral	0 (0,0%)	6 (85,7%)
Disagree	1 (14,3%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	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.

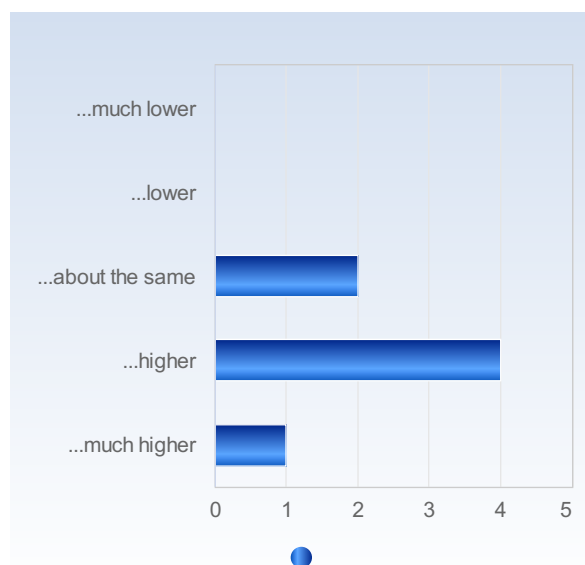
	Number of responses	Cumulated responses
Strongly agree	1 (14,3%)	1 (14,3%)
Agree	2 (28,6%)	3 (42,9%)
Neutral	3 (42,9%)	6 (85,7%)
Disagree	1 (14,3%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	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...

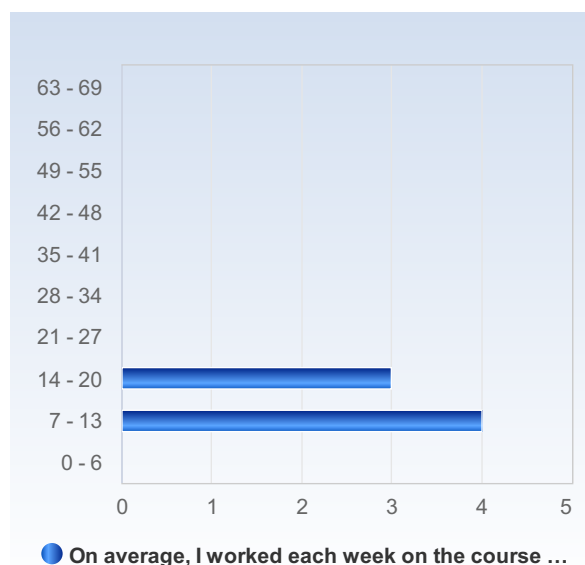
	Number of responses	Cumulated responses
...much higher	1 (14,3%)	1 (14,3%)
...higher	4 (57,1%)	5 (71,4%)
...about the same	2 (28,6%)	7 (100,0%)
...lower	0 (0,0%)	7 (100,0%)
...much lower	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	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%)

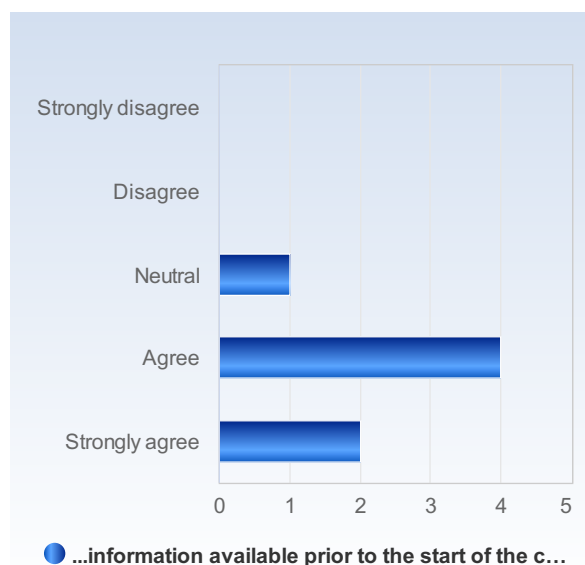


● On average, I worked each week on the course ...

	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

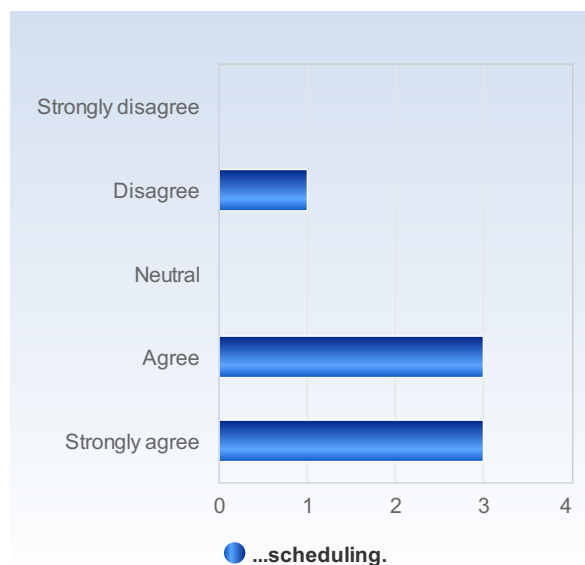
Administration during the course functioned well in terms of...

...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%)



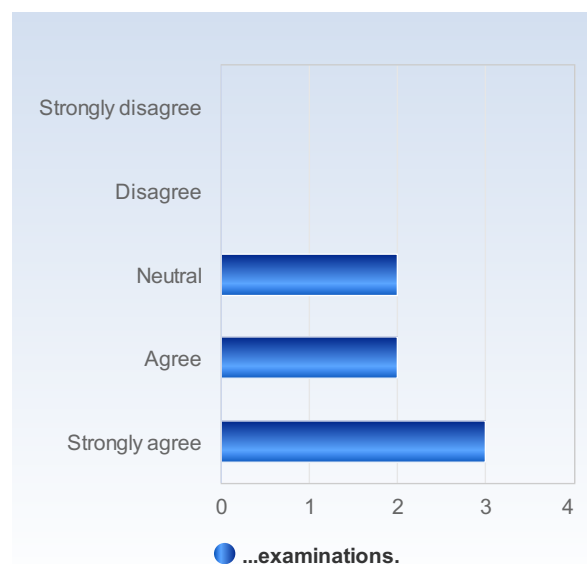
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...information available prior to the start of the course.	1,9	0,7	37,2 %	1,0	1,5	2,0	2,0	3,0

...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

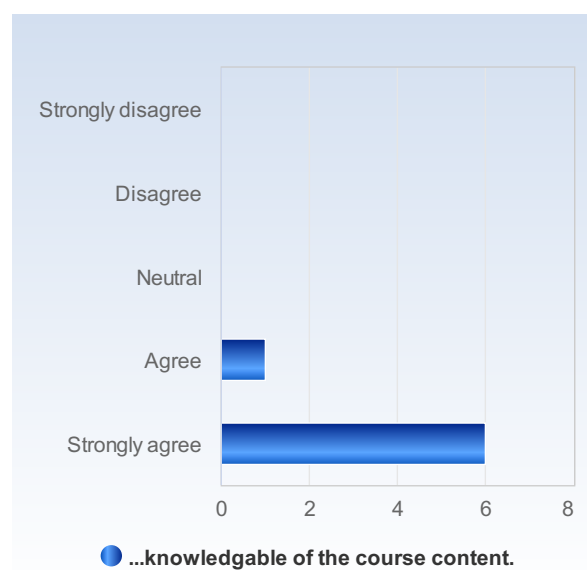
...examinations.	Number of responses	Cumulated responses
Strongly agree	3 (42,9%)	3 (42,9%)
Agree	2 (28,6%)	5 (71,4%)
Neutral	2 (28,6%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



...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%)



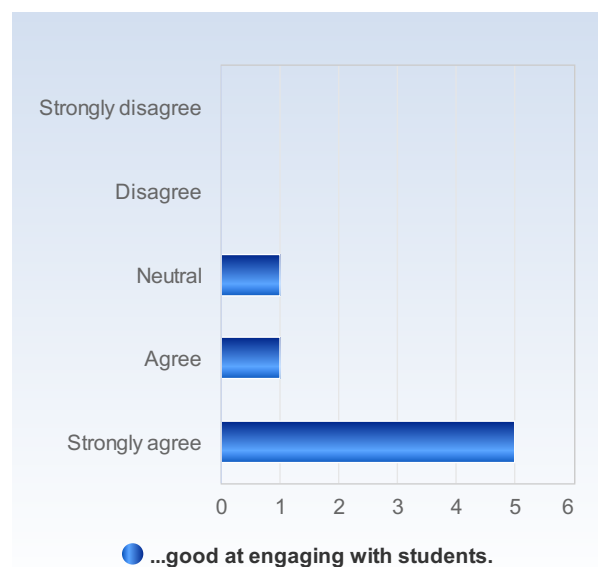
...knowledgable of the course content.	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...knowledgable of the course content.	1,1	0,4	33,1 %	1,0	1,0	1,0	1,0	2,0

...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%)



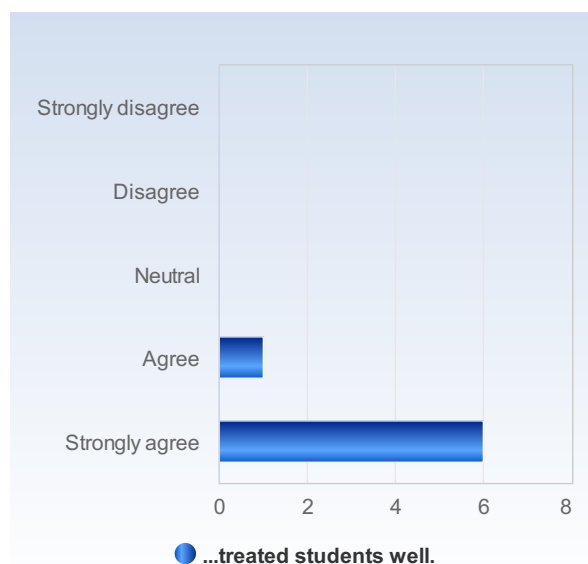
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...good at providing feedback.	1,4	0,5	37,4 %	1,0	1,0	1,0	2,0	2,0

...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%)



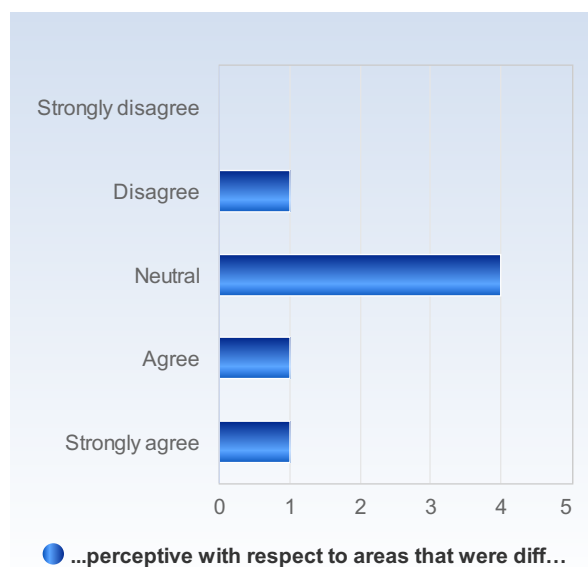
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...good at engaging with students.	1,4	0,8	55,1 %	1,0	1,0	1,0	1,5	3,0

...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%)



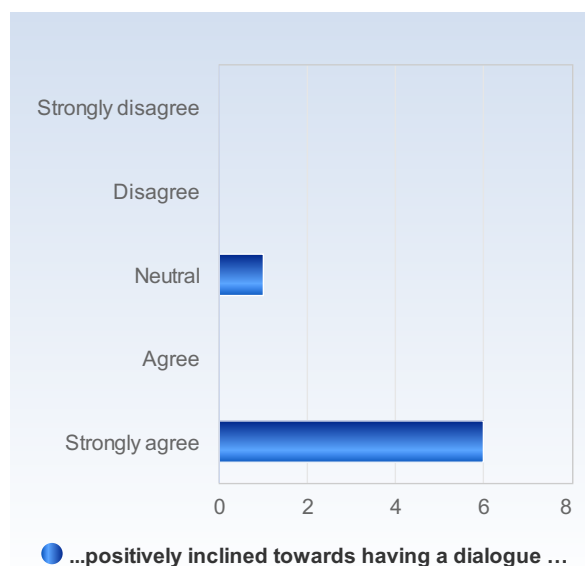
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...treated students well.	1,1	0,4	33,1 %	1,0	1,0	1,0	1,0	2,0

...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%)



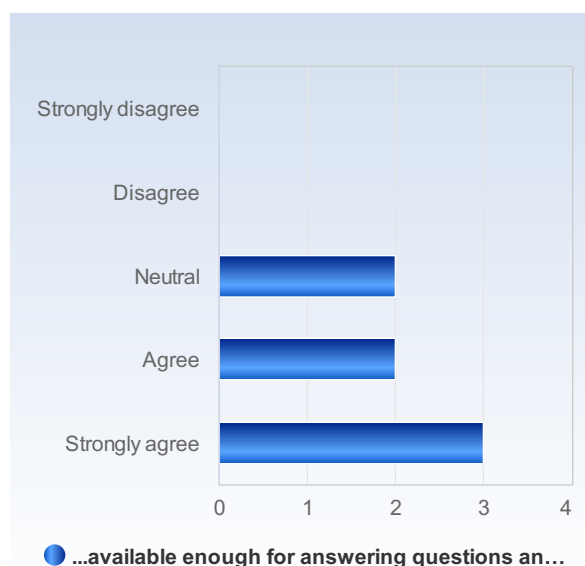
	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
...perceptive with respect to areas that were difficult for students to understand.	2,7	1,0	35,0 %	1,0	2,5	3,0	3,0	4,0

...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%)



	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

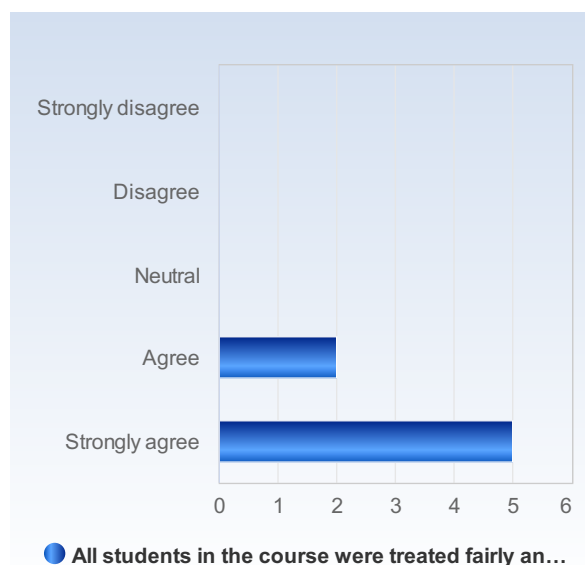
...available enough for answering questions and addressing concerns.	Number of responses	Cumulated responses
Strongly agree	3 (42,9%)	3 (42,9%)
Agree	2 (28,6%)	5 (71,4%)
Neutral	2 (28,6%)	7 (100,0%)
Disagree	0 (0,0%)	7 (100,0%)
Strongly disagree	0 (0,0%)	7 (100,0%)
Total	7 (100,0%)	7 (100,0%)



	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

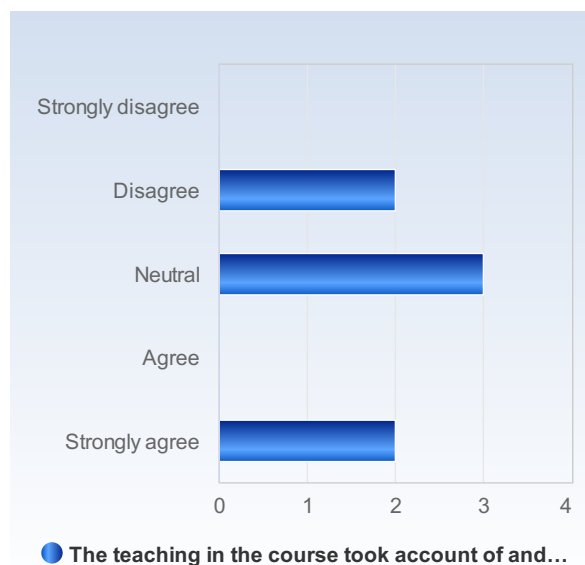
Equal treatment:

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