



LUND UNIVERSITY
Faculty of Science

Centre for Mathematical Sciences
Division of Mathematics and Numerical Analysis

Course Analysis for MATB25 Discrete Mathematics, spring 2024

Course Information

Lecturer: Frank Wikström

Teaching assistants: Frank Wikström, Jan Thomm

Number of students:

24 newly registered and 10 re-registered.

7 students answered the CEQ (which is joint with FMAB75, the LTH course).

Examination

Assignment: 24 students passed.

Oral examination: 18 students passed.

Written examination: 18 students passed.

- Ordinary examination 13/3 2024: 21 students participated and 15 of them passed.

- Resit examination 20/8 2024: 5 students participated and 3 of them passed.

Final grades:

In all, 18 students, including 2 re-registered students, have got their final grade.

10 passed with distinction.

8 passed.

Course Evaluation

Summary of student's answers:

See enclosed CEQ

Teachers' comments:

All lectures were given live on campus. The attendance at the lectures was good, but few students showed up for the tutorials, and we quickly merged the two tutorial groups (originally, there was one group scheduled for the students from the science faculty and one group for the students from the engineering faculty).

Examination was done in two stages: one written exam followed by an short oral exam. There was also a mandatory programming exercise for the students at the science faculty.

Changes from the previous course realisation:

No major changes were made, since it was the first time I gave the course.

Suggestions for the next course realisation:

I would suggest adding a few lectures to the course and using the extra time to expand the graph theory section which right now is very shallow and mostly contains definitions. It would, for example, make sense to include some of the standard algorithms for shortest paths and minimal spanning trees, as well as adding some material on graph colourings.

Course evaluation report - CEQ, FMAB75

Basic facts

Course name	Discrete Mathematics	
Course code	FMAB75	Study hours according the curricula
ECTS credits	7.5 hp	
Year	202324	Lectures 54 h
Study period the course was finished	VT_LP1	Group work 0 h
Programme	all	Laboratories 0 h
Registered students	54	Time with supervisor 2 h
Number answers and response rate	7 / 13 %	Self study time 144 h
Number answers from males	6	
Number answers from females	1	

Since less than 20 students have answered the questionnaire no statistical significance tests have been made.

Summary of questionnaires

The CEQ-score span between -100 och +100, there -100 means that "I fully disagree to the statement" and +100 "I fully agree to the statement".

Presence at teaching

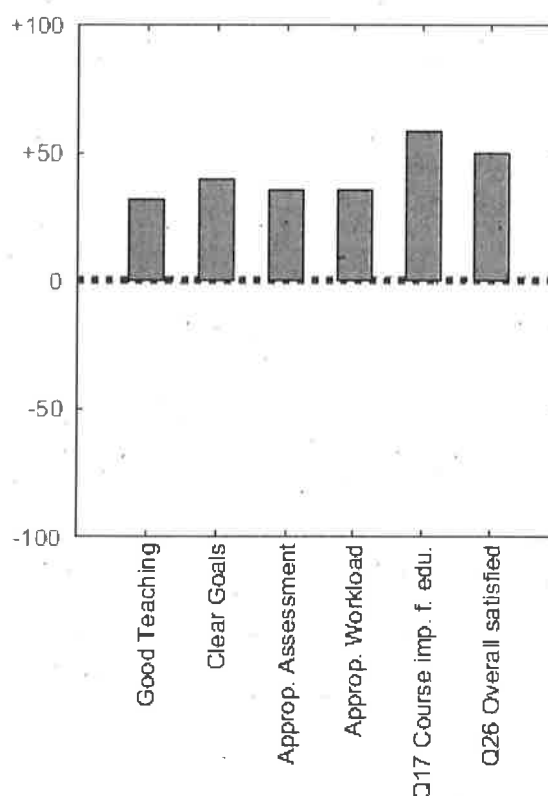
Part of teaching	Number	Share
0 %	1	14 %
20 %	0	0 %
40 %	0	0 %
60 %	2	29 %
80 %	0	0 %
100 %	4	57 %

CEQ-scales & special questions

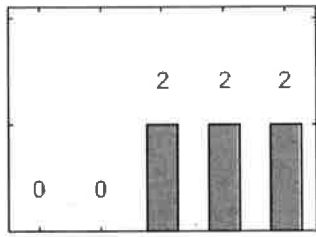
Scale	CEQ-score	StdDev
Good Teaching	+32	42
Clear Goals and Standards	+40	31
Appropriate Assessment	+35	33
Appropriate Workload	+35	47
Generic Skills	+15	32

Special questions

The course seems important for my edu.	+58	49
Overall, I am satisfied with this course	+50	45



Distribution of the answers from question 26: "Overall, I am satisfied with this course"

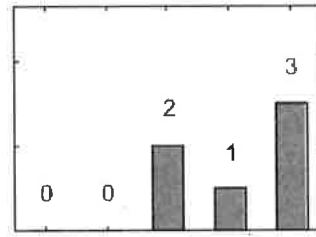


CEQ-score mark Number Share

Dissatisfied (<0)	0	0 %
Neutral (0)	2	29 %
Satisfied (>0)	4	57 %
No answer	1	14 %

Mean of CEQ-score	+50
Standard deviation (StdDev)	45

Distribution of the answers from question 17: "The course seems important for my education"



CEQ-score mark Number Share

-100	0	0 %
-50	0	0 %
+0	2	29 %
+50	1	14 %
+100	3	43 %

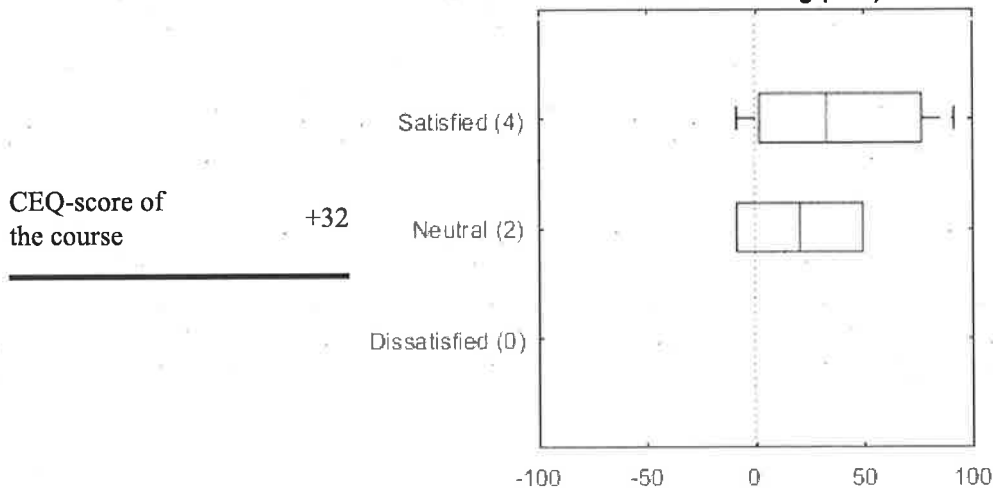
Mean of CEQ-score	+58
Standard deviation (StdDev)	49

Summary scales divided on satisfaction

Statistical examination has not been done due to at least two groups consist of less than five students

Good Teaching

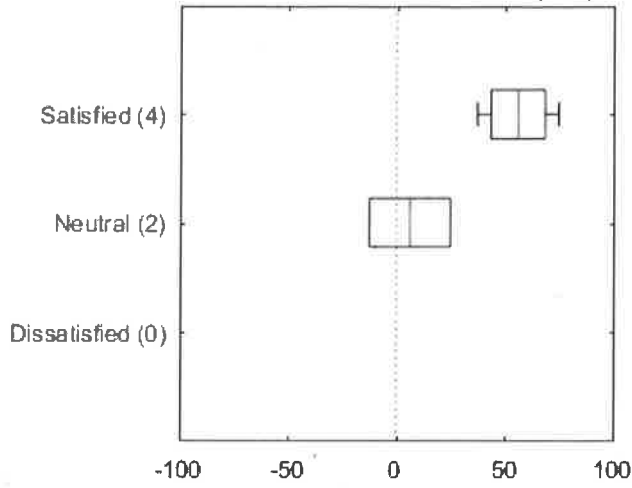
Good Teaching (+32)



Clear Goals and Standards

Clear Goals and Standards (+40)

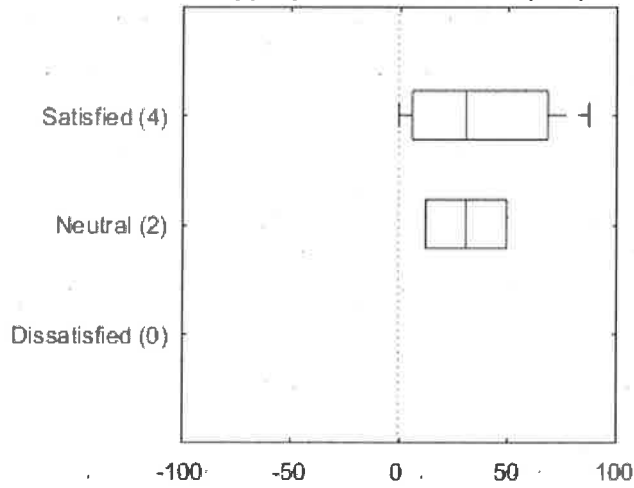
CEQ-score of the course +40



Appropriate Assessment

Appropriate Assessment (+35)

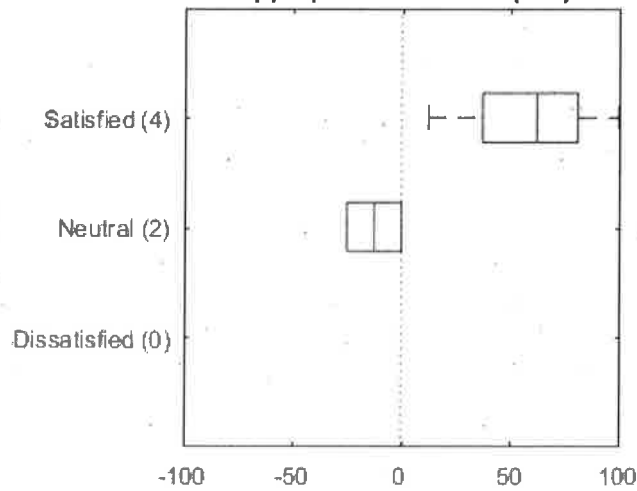
CEQ-score of the course +35



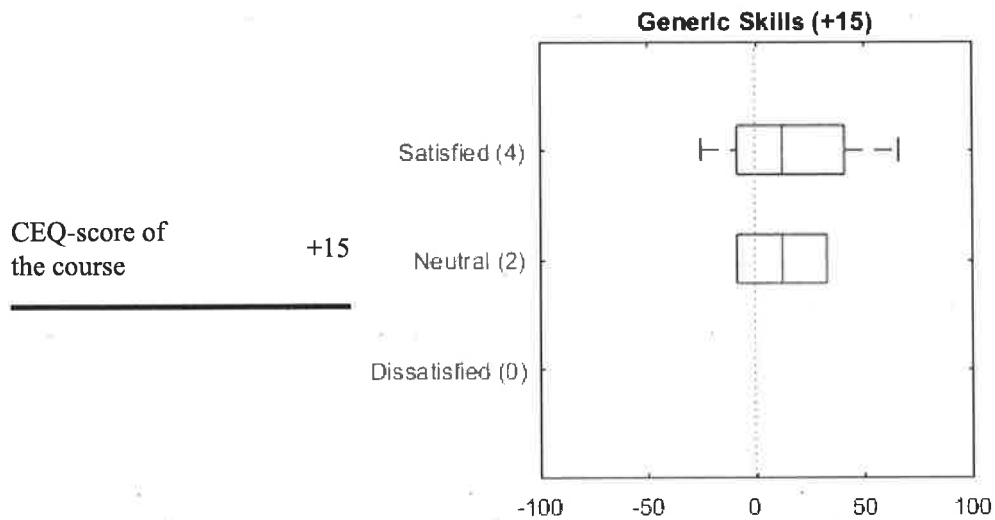
Appropriate Workload

Appropriate Workload (+35)

CEQ-score of the course +35



Generic Skills



Answers to each question

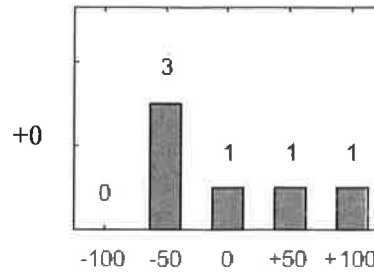
The questions in bold are reverse positive.

Statistical examination between dissatisfied and satisfied has not been done due to at least one of the groups consist of less than five students

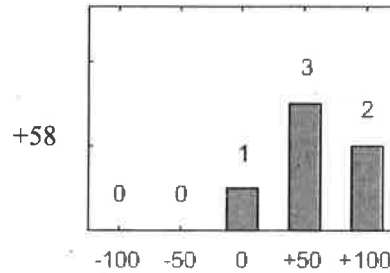
Good Teaching (+32)

Question	CEQ-score	Histogram												
3. The teaching has motivated me to do my best	+50	<table border="1"> <tr><th>Score</th><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>0</td><td>2</td><td>2</td></tr> </table>	Score	0	+50	+100	Count	0	2	2				
Score	0	+50	+100											
Count	0	2	2											
7. During the course I have received many valuable comments on my achievements	-25	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>2</td><td>1</td><td>1</td><td>2</td><td>0</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	2	1	1	2	0
Score	-100	-50	0	+50	+100									
Count	2	1	1	2	0									
15. The teachers made a real effort to understand the problems and difficulties one might be having in this course	+50	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>0</td><td>0</td><td>1</td><td>3</td><td>1</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	0	0	1	3	1
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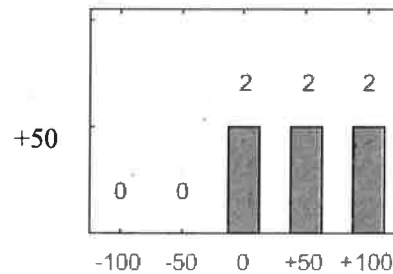
18. The teaching staff normally gave me helpful feedback on the progress of my work



19. My lecturers were extremely good at explaining things



21. The teachers on the course worked hard to make the subject interesting



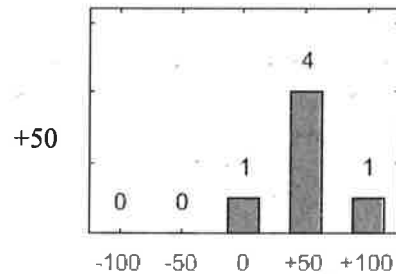
Clear Goals and Standards (+40)

Question

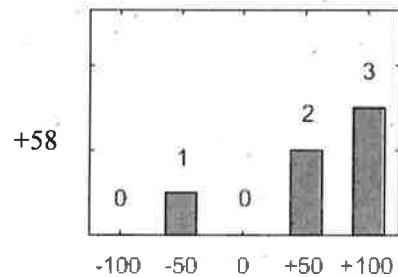
CEQ-score

Histogram

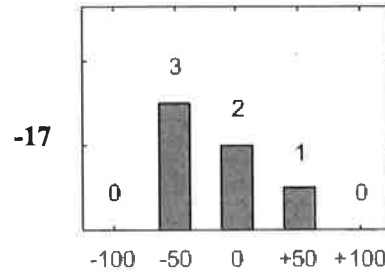
1. It was easy to know the standard of work expected



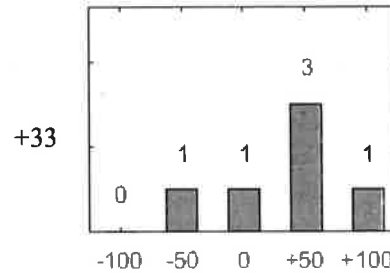
6. I usually had a clear idea of where I was going and what was expected of me in this course



13. It was often hard to discover what was expected of me in this course



25. The teachers made it clear right from the start what they expected from the students



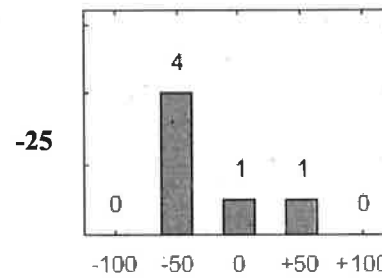
Appropriate Assessment (+35)

Question

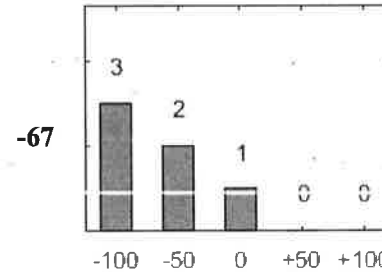
CEQ-score

Histogram

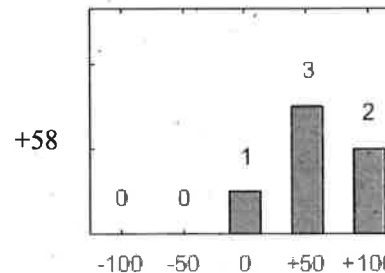
8. To do well in this course all you really needed was a good memory



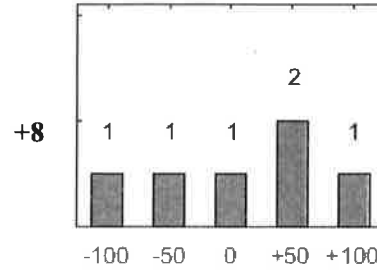
12. The teachers seemed more interested in testing what I had memorised than what I had understood



16. The assessment methods employed in this course required an in-depth understanding of the course content



20. Too much of the assessment was just about facts



Appropriate Workload (+35)

Question	CEQ-score	Histogram												
4. The workload has been much too heavy	-33	<table border="1"> <thead> <tr> <th>Score</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>-100</td> <td>1</td> </tr> <tr> <td>-50</td> <td>3</td> </tr> <tr> <td>0</td> <td>1</td> </tr> <tr> <td>+50</td> <td>1</td> </tr> <tr> <td>+100</td> <td>0</td> </tr> </tbody> </table>	Score	Count	-100	1	-50	3	0	1	+50	1	+100	0
Score	Count													
-100	1													
-50	3													
0	1													
+50	1													
+100	0													
14. I was generally given enough time to understand the things I had to learn	+50	<table border="1"> <thead> <tr> <th>Score</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>-100</td> <td>0</td> </tr> <tr> <td>-50</td> <td>1</td> </tr> <tr> <td>0</td> <td>1</td> </tr> <tr> <td>+50</td> <td>1</td> </tr> <tr> <td>+100</td> <td>3</td> </tr> </tbody> </table>	Score	Count	-100	0	-50	1	0	1	+50	1	+100	3
Score	Count													
-100	0													
-50	1													
0	1													
+50	1													
+100	3													
22. There was a lot of pressure on me as a student in this course	-25	<table border="1"> <thead> <tr> <th>Score</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>-100</td> <td>1</td> </tr> <tr> <td>-50</td> <td>2</td> </tr> <tr> <td>0</td> <td>2</td> </tr> <tr> <td>+50</td> <td>1</td> </tr> <tr> <td>+100</td> <td>0</td> </tr> </tbody> </table>	Score	Count	-100	1	-50	2	0	2	+50	1	+100	0
Score	Count													
-100	1													
-50	2													
0	2													
+50	1													
+100	0													
24. The sheer volume of work in this course made it impossible to comprehend everything thoroughly	-33	<table border="1"> <thead> <tr> <th>Score</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>-100</td> <td>1</td> </tr> <tr> <td>-50</td> <td>3</td> </tr> <tr> <td>0</td> <td>1</td> </tr> <tr> <td>+50</td> <td>1</td> </tr> <tr> <td>+100</td> <td>0</td> </tr> </tbody> </table>	Score	Count	-100	1	-50	3	0	1	+50	1	+100	0
Score	Count													
-100	1													
-50	3													
0	1													
+50	1													
+100	0													

Generic Skills (+15)

Question	CEQ-score	Histogram												
2. The course has developed my problem-solving skills	+50	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>0</td><td>0</td><td>2</td><td>2</td><td>2</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	0	0	2	2	2
Score	-100	-50	0	+50	+100									
Count	0	0	2	2	2									
5. The course has sharpened my analytic skills	+58	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>0</td><td>0</td><td>1</td><td>3</td><td>2</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	0	0	1	3	2
Score	-100	-50	0	+50	+100									
Count	0	0	1	3	2									
9. The course helped me develop my ability to work in a group	-42	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>2</td><td>1</td><td>3</td><td>0</td><td>0</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	2	1	3	0	0
Score	-100	-50	0	+50	+100									
Count	2	1	3	0	0									
10. The course has made me feel more confident about tackling new and unfamiliar problems	+50	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>0</td><td>0</td><td>2</td><td>2</td><td>2</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	0	0	2	2	2
Score	-100	-50	0	+50	+100									
Count	0	0	2	2	2									
11. The course has improved my skills in written communication	+0	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>0</td><td>2</td><td>3</td><td>0</td><td>1</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	0	2	3	0	1
Score	-100	-50	0	+50	+100									
Count	0	2	3	0	1									
23. The course has helped me to develop the ability to plan my work	-25	<table border="1"> <tr><th>Score</th><td>-100</td><td>-50</td><td>0</td><td>+50</td><td>+100</td></tr> <tr><th>Count</th><td>1</td><td>2</td><td>2</td><td>1</td><td>0</td></tr> </table>	Score	-100	-50	0	+50	+100	Count	1	2	2	1	0
Score	-100	-50	0	+50	+100									
Count	1	2	2	1	0									

Free text answers

The free text answers are pre-reviewed by the students' representatives.

What were the best aspects of the course

Satisfied students

We could get answers to the exercises and additional knowledge in the exercise sessions.

Good that we were not bombarded with obligatory quiz and assignments. Up to each person to study.

Neutral students

Dissatisfied students

What aspects of the course are most in need of improvement?

Satisfied students

That I am allowed to take a hand written cheat sheet into the exam, such that the testing is less about memorising facts and more about understanding concepts.

The exercise session could better point out knowledge that we should know but didn't have the time to cover in the lecture.

Neutral students

Dissatisfied students

