LUND UNIVERSITY
Faculty of Science

Course Analysis for NUMN21 Advanced course in Numerical Algorithms with Python/SciPy, Autumn 2022

Course Information

Lecturer: Claus Führer, Robert Klöfkorn, Andreas Langer
Teaching assistants: None.
Number of students:
7 newly registered and 0 re-registered.
0 students answered the course evaluation. Additionally, a separate survey was made at LTH were 10 (40%) of the students answered.

Examination

Project and oral examination: 11 students passed.

Final grades (pass/fail):
In all, 6 students, including 0 re-registered students, have got their final grade. 6 passed.

Course Evaluation

Summary of student's answers:
For this course with double course code the survey was carried out by LTH (course code FNMM05) and sent out to all students of the course. 10 students answered the survey.

Teachers' comments:
The teaching team thought the course went very well. The attached survey suggests that the students were very happy with the course.

Changes from the previous course realization:
The course was given in a classroom only format, no zoom lectures or exercises were offered.

Suggestions for the next course realization:
No changes are planned.

Course evaluation report - CEQ, FMNN25

Basic facts

Course name	**Advanced Course in Numerical Algorithms with Python/SciPy**
Course code	FMNN25
ECTS credits	7.5 hp
Year	202223
Study period the course was finished	HT_LP1
Programme	all
Registered students	25
Number answers and response rate	10 / 40 %
Number answers from males	9
Number answers from females	1

Study hours according the curricula

Lectures	28 h
Group work	0 h
Laboratories	0 h
Time with supervisor	3 h
Self study time	169 h

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 %	0	0 %
20 %	1	10 %
40 %	0	0 %
60 %	0	0 %
80 %	4	40 %
100 %	5	50 %

CEQ-scales & special questions

Scale	CEQ-score	StdDev
Good Teaching	+19	26
Clear Goals and Standards	-4	29
Appropriate Assessment	+50	25
Appropriate Workload	-8	48
Generic Skills	+16	39
Special questions		
The course seems important for my edu.	+25	54
Overall, I am satisfied with this course	+15	41
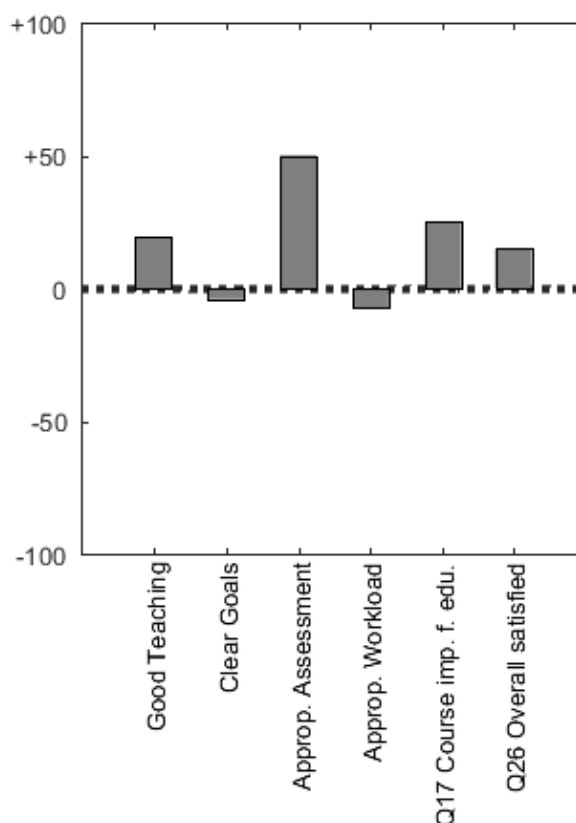
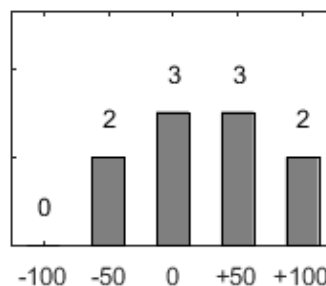**Distribution of the answers from question 26: "Overall, I am satisfied with this course"**

Distribution of the answers from question 17: "The course seems important for my education"
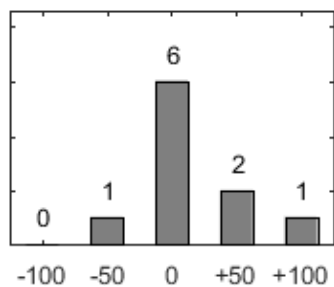
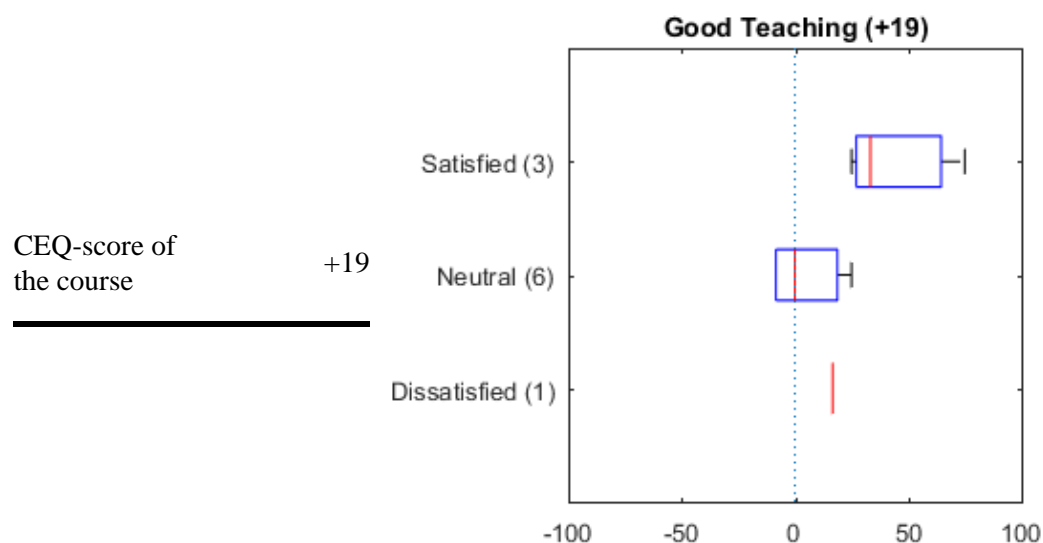| CEQ-score mark	Number	Share
Dissatisfied (<0)	1	10 %
Neutral (0)	6	60 %
Satisfied (>0)	3	30 %
No answer	0	0 %
Mean of CEQ-score		+15
Standard deviation (StdDev)		41

CEQ-score mark	Number	Share
-100	0	0 %
-50	2	20 %
+0	3	30 %
+50	3	30 %
+100	2	20 %
Mean of CEQ-score		+25
Standard deviation (StdDev)		54

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

CEQ-score of the course	+19

Clear Goals and Standards

CEQ-score of
the course

-4

Appropriate Assessment

CEQ-score of
the course

+50

Appropriate Workload

CEQ-score of
the course

-8

Generic Skills

CEQ-score of
the course   +16
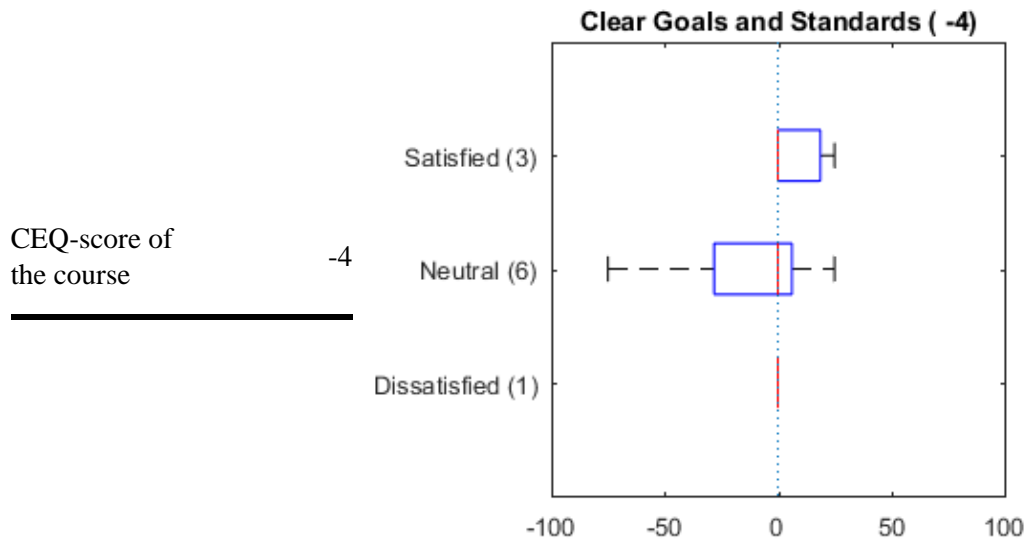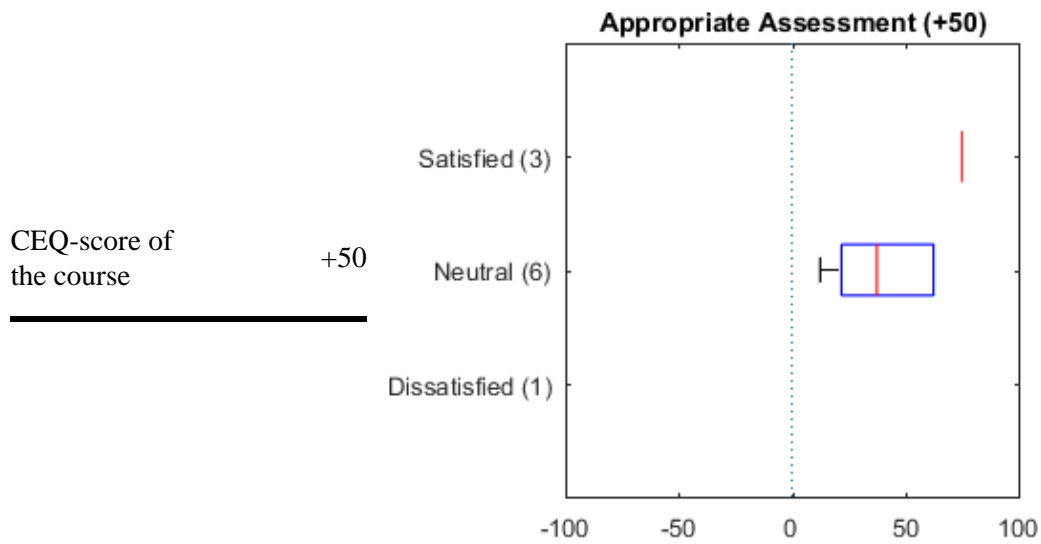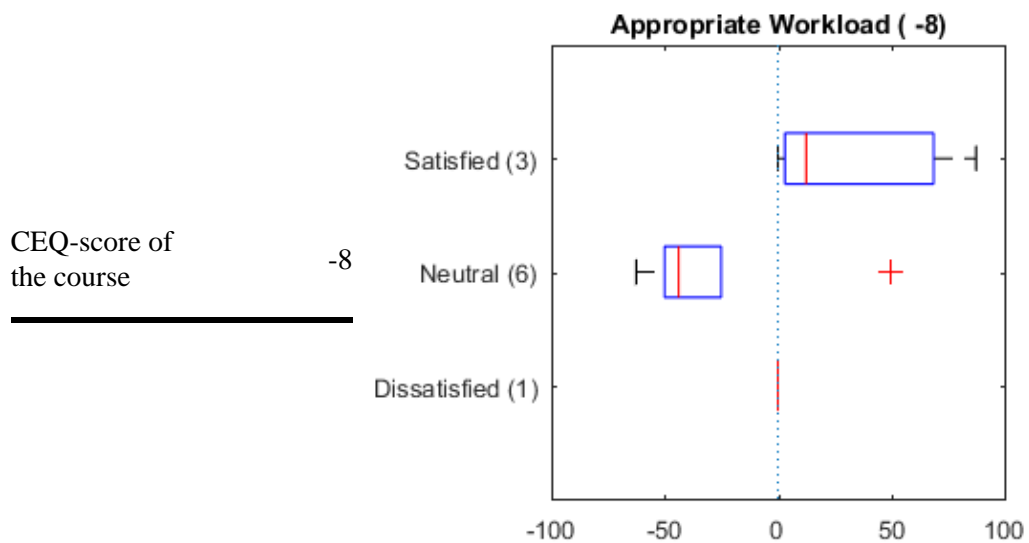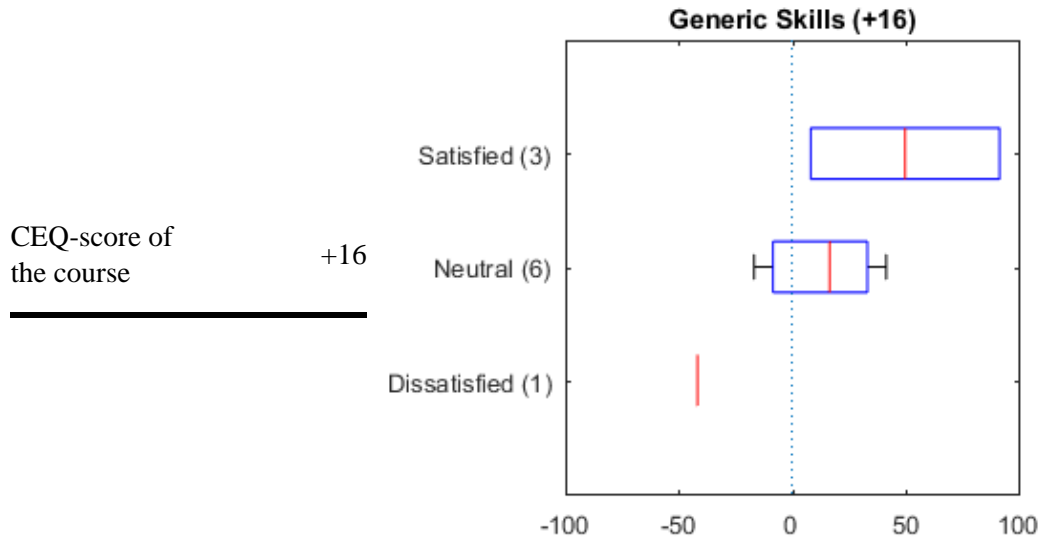
Answers to each question

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 (+19)

Question	CEQ-score	Histogram

3. The teaching has motivated me to do my best +15

7. During the course I have received many valuable comments on my achievements +25

15. The teachers made a real effort to understand the problems and difficulties one might be having in this course +17

18. The teaching staff normally gave me helpful feedback on the progress of my work

+17
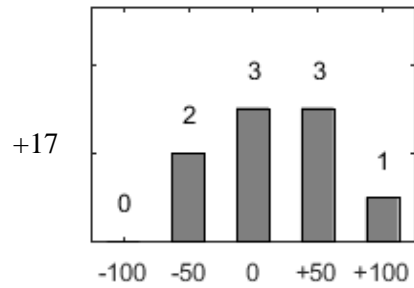
19. My lecturers were extremely good at explaining things

+0
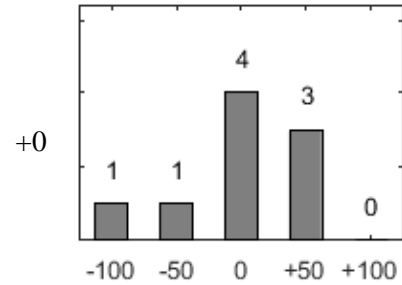
21. The teachers on the course worked hard to make the subject interesting

+33
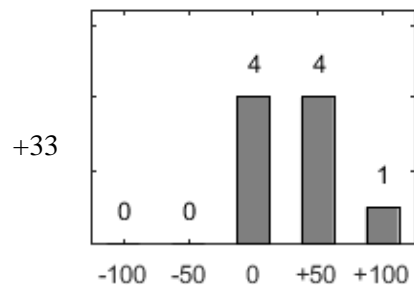
Clear Goals and Standards (-4)

Question	CEQ-score	Histogram

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

+30
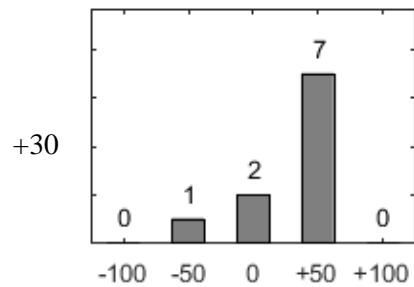
6. I usually had a clear idea of where I was going and what was expected of me in this course

-5
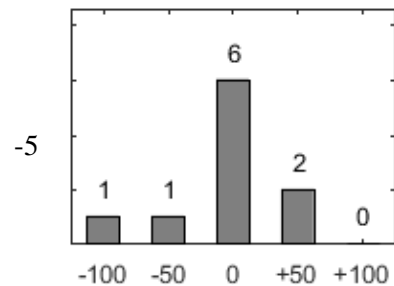
13. It was often hard to discover what was expected of me in this course

+20
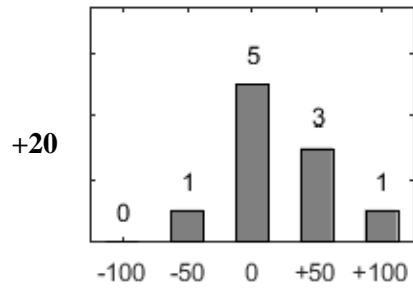
25. The teachers made it clear right from the start what they expected from the students

-17
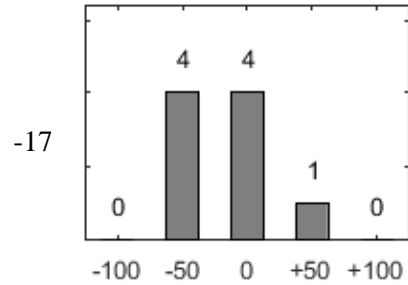
Appropriate Assessment (+50)

Question	CEQ-score	Histogram

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

-44

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

-44

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

+20

20. Too much of the assessment was just about facts

-75
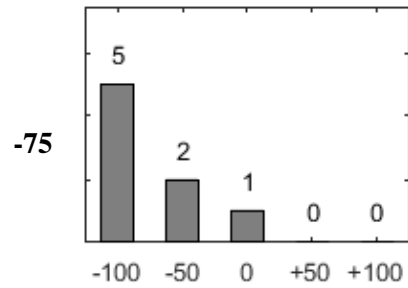
Appropriate Workload (-8)

Question	CEQ-score	Histogram
4. The workload has been much too heavy	**+25**	
14. I was generally given enough time to understand the things I had to learn	-5	
22. There was a lot of pressure on me as a student in this course	**+10**	
24. The sheer volume of work in this course made it impossible to comprehend everything thoroughly	**-10**	

Generic Skills (+16)

Question	CEQ-score	Histogram
2. The course has developed my problem-solving skills	+55	
5. The course has sharpened my analytic skills	+25	
9. The course helped me develop my ability to work in a group	+35	
10. The course has made me feel more confident about tackling new and unfamiliar problems	+20	
11. The course has improved my skills in written communication	-5	
23. The course has helped me to develop the ability to plan my work	-6	

Free text answers

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

What were the best aspects of the course

Satisfied students

Space for problem solving

Neutral students

De projekt som ersätter tentamen är intressanta.

The open ended questions (there could be some more of them) and the team work.

Engagerade lärare defintitivt, man märker av att det finns ett engagemang och intresse för ämnet

Dissatisfied students

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

Satisfied students

More programming lecture content

Neutral students

Mer läsning.

The time given for the sheets was too little -> there was not really enough time to look into documentation tools or to get a deeper understanding of / to revise the mathematics behind the problems.

Arbetsbördan är väldigt tung även om du är i en grupp av fyra personer. Det kändes som matten var alldeles för avancerad för en D-student att ta sig an detta trots att grundkursen i Numerisk Analys är ett förkunskapskrav. Programmeringen var väldigt tung med, svårhetsgraden gick avsevärt upp i jämförelse till föreläsningarna där de gick igenom basic python kod medans på projekten var det absurt.

Det är väldigt lite fokus på matematiken i denna kurs. Det är väldigt avancerad matte men den gås bara igenom en föreläsning per problem. Som en Dataingenjör så gör det denna kurs väldigt tung eftersom man måste förstå matten.

Dissatisfied students