



LUND UNIVERSITY
Faculty of Science

Centre for Mathematical Sciences
Division of Mathematics and Numerical Analysis

Course Analysis for BERN01 Modelling in Computational Science, Autumn 2024

Course Information

Lecturer: Philipp Birken, Victor Olareau, Jan Forsman, Anders Irbäck, Wenxin Zhang, Linda Hartmann

Teaching assistants: Niloofar Momeni, Alexander Degener

Number of students:

30 newly registered and 1 re-registered.

12 students answered the course evaluation, 8 of them are enrolled in the master program in computational science, 1 in applied computational science, 3 in other programs.

Examination

Project: 29 students passed.

Oral presentation: 29 students passed.

Final grades:

In all, 29 students, including 1 re-registered students, have got their final grade.

18 passed with distinction.

11 passed.

Course Evaluation

Summary of student's answers:

The students were overall satisfied with the course. The students appreciated the structure as a project course. Project 3 was criticized as being too unclear and less interesting than the others. More clear instructions about scope and length of the report were desired.

Teachers' comments:

This was the first time this course was given. The teaching consisted of a few lectures per project and an introductory lecture, as well as a few exercise sessions. Three compulsory projects carried out in small groups are included in the course. These are then presented to the whole group.

Changes from the previous course realisation:

-The coding in project 1 was made easier by giving more instructions, and reducing the computational cost of the experiments

-Project 2 was considered easier than the others and was be made more difficult

-The coding in project 3 was made easier by simplifying the data handling

We have organized things in a way to allow students to start working on the project as soon as possible, in particular in project 3.

Suggestions for the next course realisation:

We will switch places for projects 2 and 3. The current project 2 is the easiest one, so this should help with the last project being in parallel with the exam in another course.

The reports will be described more clearly on the Canvas page.

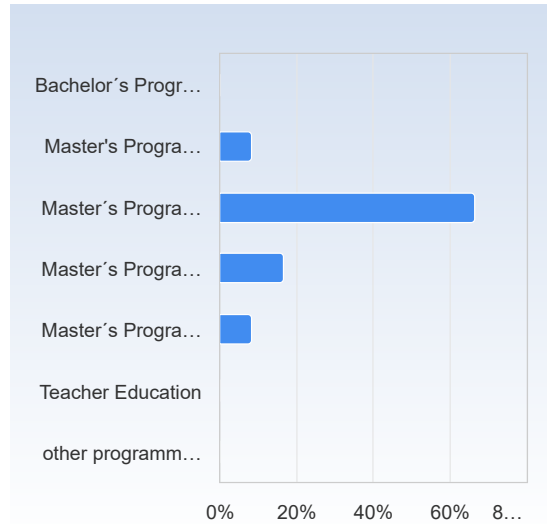
We will discuss collaboration versus cooperation more in the course.

BERN01HT24 Computational Science: Modelling in Computational Science

Respondents: 31
Answer Count: 12
Answer Frequency: 38.71%

I have studied this course as part of

I have studied this course as part of	Number of responses
Bachelor's Programme, any specialization	0 (0.0%)
Master's Programme in Mathematics, Mathematical Statistics or Physics	1 (8.3%)
Master's Programme in Computational Science	8 (66.7%)
Master's Programme in Applied Computational Science	2 (16.7%)
Master's Programme, other specialization	1 (8.3%)
Teacher Education	0 (0.0%)
other programme or as stand alone course	0 (0.0%)
Total	12 (100.0%)

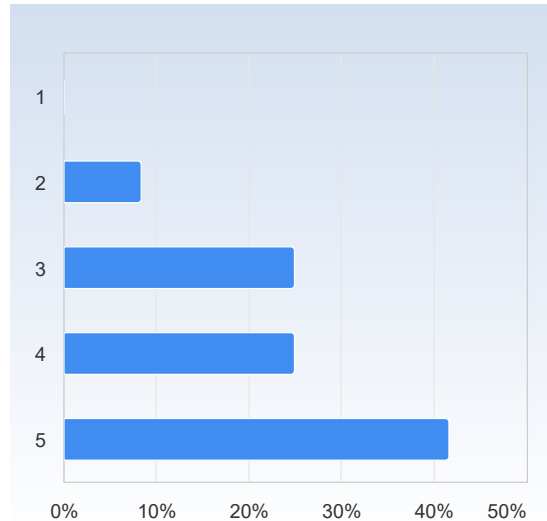


	Mean	Standard Deviation
I have studied this course as part of	5.7	1.6

On the scale 1-5 select the option that best matches your opinion: 1= disagree completely → 3= partly agree → 5= agree completely

2. My prior knowledge has been sufficient to assimilate the contents of this course.

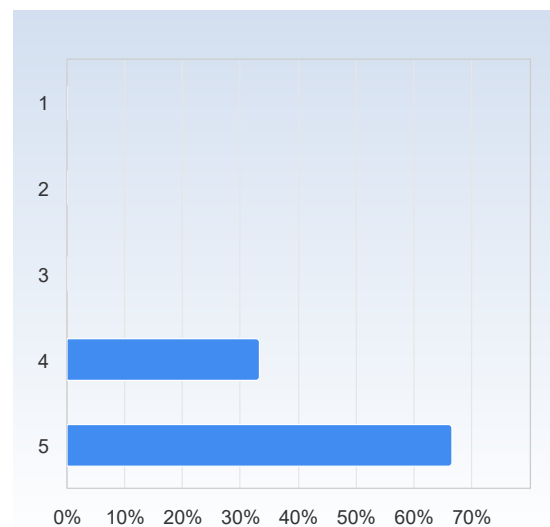
2. My prior knowledge has been sufficient to assimilate the contents of this course.	Number of responses
1	0 (0.0%)
2	1 (8.3%)
3	3 (25.0%)
4	3 (25.0%)
5	5 (41.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
2. My prior knowledge has been sufficient to assimilate the contents of this course.	4.0	1.0

3. I have participated actively in the course.

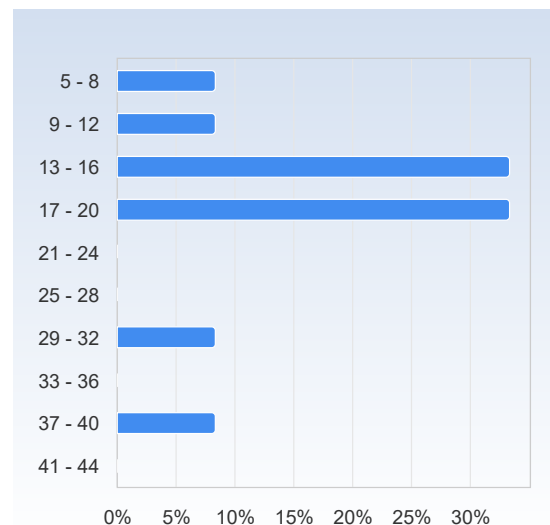
3. I have participated actively in the course.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	4 (33.3%)
5	8 (66.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
3. I have participated actively in the course.	4.7	0.5

Average number of hours spent in total on the course per week (including scheduled activities):

Average number of hours spent in total on the course per week (including scheduled activities):	Number of responses
5 - 8	1 (8.3%)
9 - 12	1 (8.3%)
13 - 16	4 (33.3%)
17 - 20	4 (33.3%)
21 - 24	0 (0.0%)
25 - 28	0 (0.0%)
29 - 32	1 (8.3%)
33 - 36	0 (0.0%)
37 - 40	1 (8.3%)
41 - 44	0 (0.0%)
Total	12 (100.0%)



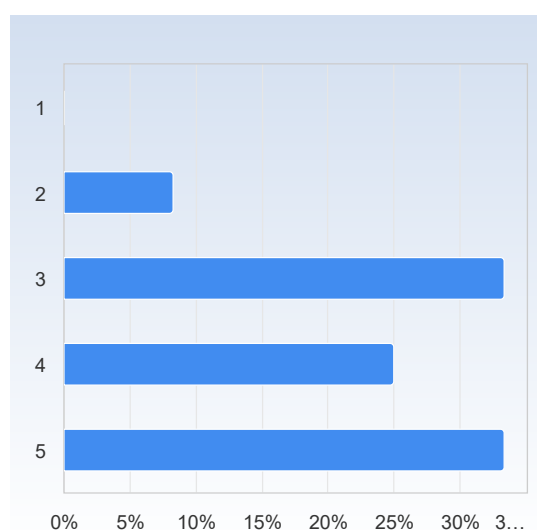
	Mean	Standard Deviation
Average number of hours spent in total on the course per week (including scheduled activities):	19.1	8.7

The course in general

On the scale 1-5 select the option that best matches your opinion: 1= disagree completely → 3= partly agree → 5= agree completely

The way the course was taught and organised suited me.

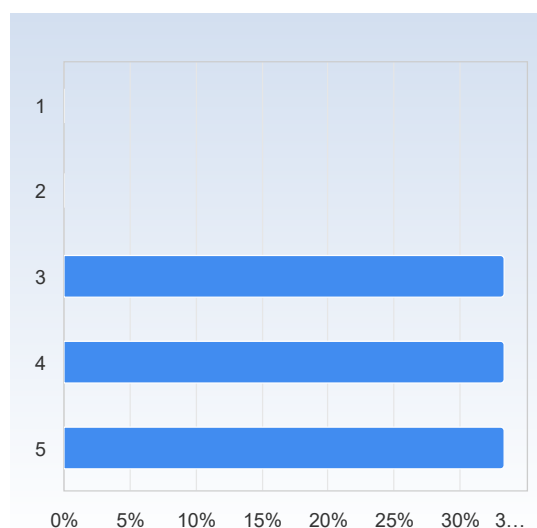
The way the course was taught and organised suited me.	Number of responses
1	0 (0.0%)
2	1 (8.3%)
3	4 (33.3%)
4	3 (25.0%)
5	4 (33.3%)
Total	12 (100.0%)



	Mean	Standard Deviation
The way the course was taught and organised suited me.	3.8	1.0

The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.

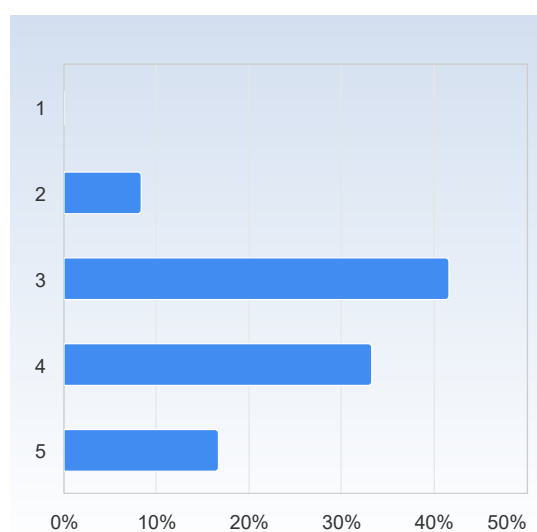
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	4 (33.3%)
4	4 (33.3%)
5	4 (33.3%)
Total	12 (100.0%)



	Mean	Standard Deviation
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	4.0	0.9

The lectures were valuable for my learning.

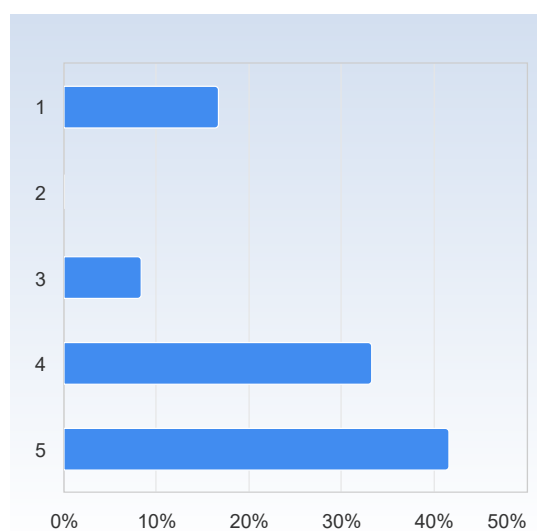
The lectures were valuable for my learning.	Number of responses
1	0 (0.0%)
2	1 (8.3%)
3	5 (41.7%)
4	4 (33.3%)
5	2 (16.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
The lectures were valuable for my learning.	3.6	0.9

The seminars were valuable for my learning.

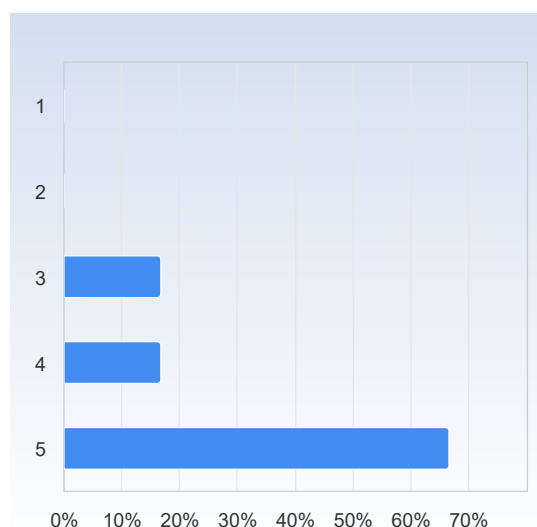
The seminars were valuable for my learning.	Number of responses
1	2 (16.7%)
2	0 (0.0%)
3	1 (8.3%)
4	4 (33.3%)
5	5 (41.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
The seminars were valuable for my learning.	3.8	1.5

Studying on my own was valuable for my learning.

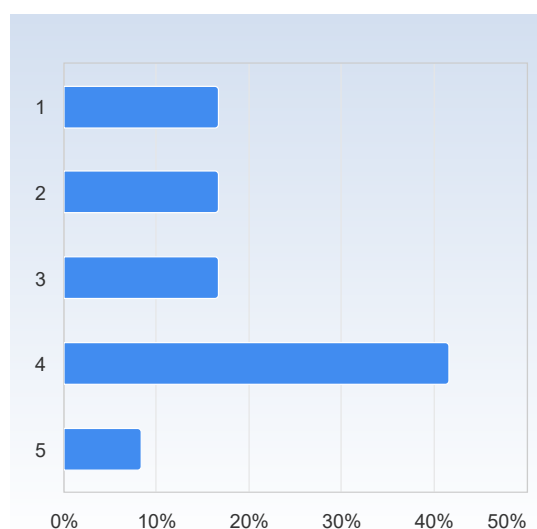
Studying on my own was valuable for my learning.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	2 (16.7%)
4	2 (16.7%)
5	8 (66.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
Studying on my own was valuable for my learning.	4.5	0.8

The course literature/material was a valuable learning resource.

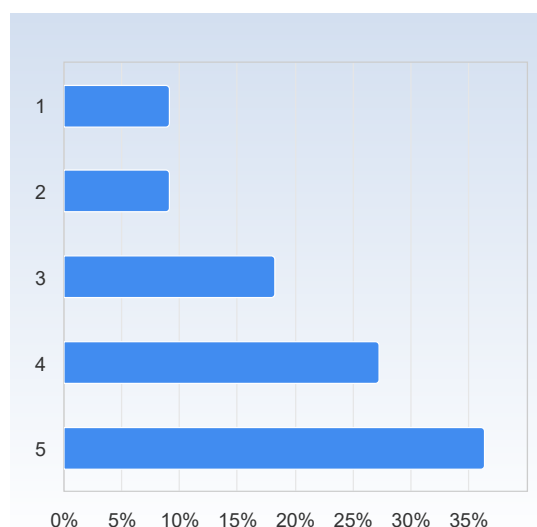
The course literature/material was a valuable learning resource.	Number of responses
1	2 (16.7%)
2	2 (16.7%)
3	2 (16.7%)
4	5 (41.7%)
5	1 (8.3%)
Total	12 (100.0%)



	Mean	Standard Deviation
The course literature/material was a valuable learning resource.	3.1	1.3

The information I received before the course start was satisfactory.

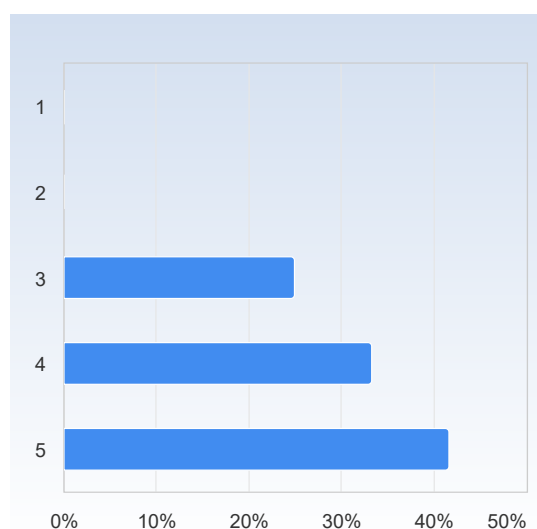
The information I received before the course start was satisfactory.	Number of responses
1	1 (9.1%)
2	1 (9.1%)
3	2 (18.2%)
4	3 (27.3%)
5	4 (36.4%)
Total	11 (100.0%)



	Mean	Standard Deviation
The information I received before the course start was satisfactory.	3.7	1.3

The communication with the teaching staff during the course was good.

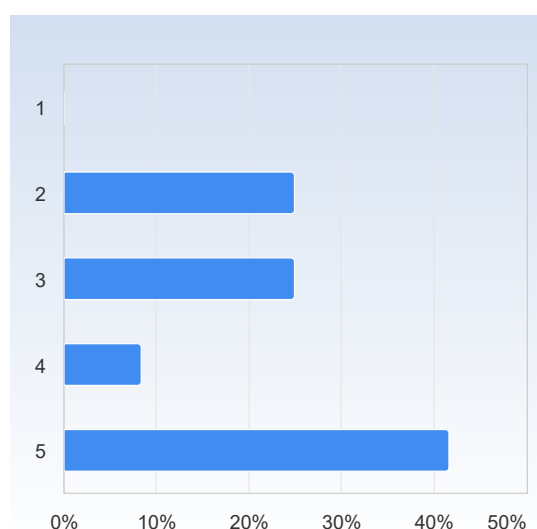
The communication with the teaching staff during the course was good.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	3 (25.0%)
4	4 (33.3%)
5	5 (41.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
The communication with the teaching staff during the course was good.	4.2	0.8

It was clear throughout the course what was expected of me.

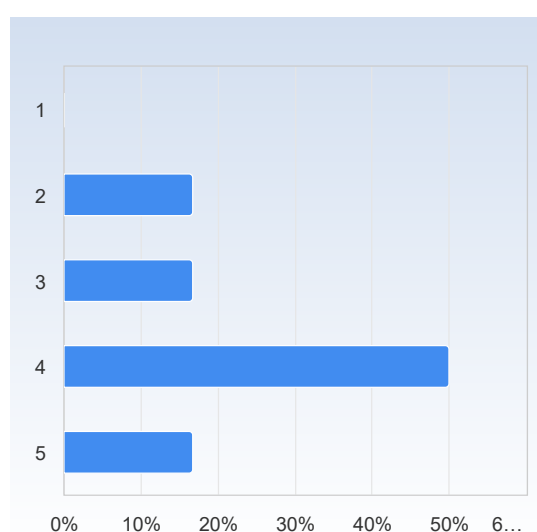
It was clear throughout the course what was expected of me.	Number of responses
1	0 (0.0%)
2	3 (25.0%)
3	3 (25.0%)
4	1 (8.3%)
5	5 (41.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
It was clear throughout the course what was expected of me.	3.7	1.3

I have received valuable feedback from my teacher/teachers during the course.

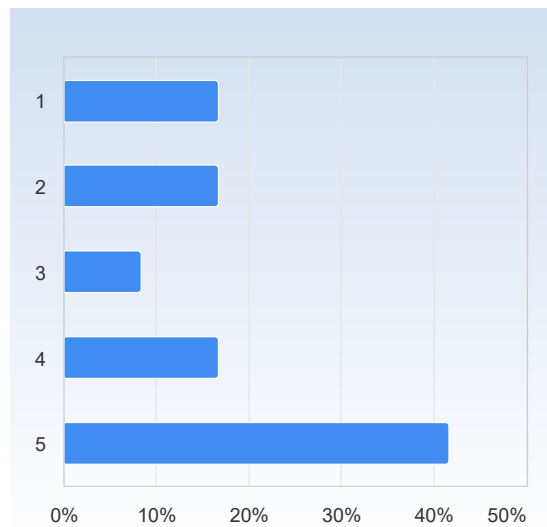
I have received valuable feedback from my teacher /teachers during the course.	Number of responses
1	0 (0.0%)
2	2 (16.7%)
3	2 (16.7%)
4	6 (50.0%)
5	2 (16.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
I have received valuable feedback from my teacher/teachers during the course.	3.7	1.0

The course had a reasonable workload.

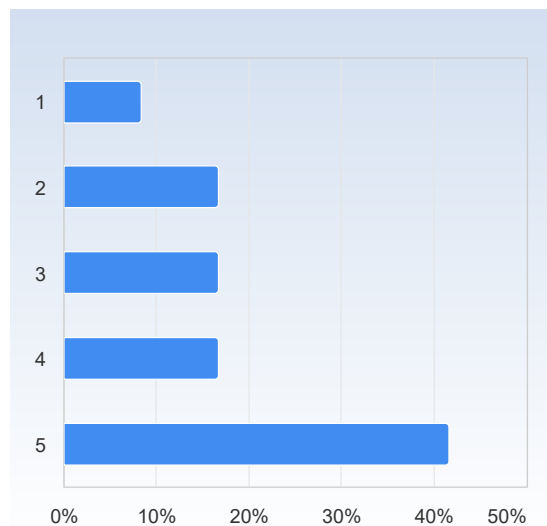
The course had a reasonable workload.	Number of responses
1	2 (16.7%)
2	2 (16.7%)
3	1 (8.3%)
4	2 (16.7%)
5	5 (41.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
The course had a reasonable workload.	3.5	1.6

The workload was evenly distributed throughout the course.

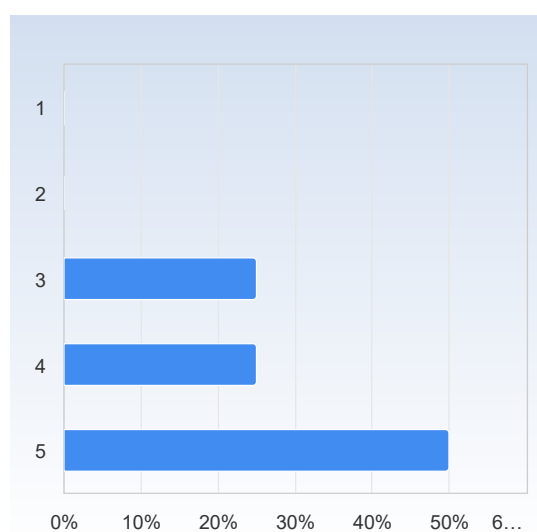
The workload was evenly distributed throughout the course.	Number of responses
1	1 (8.3%)
2	2 (16.7%)
3	2 (16.7%)
4	2 (16.7%)
5	5 (41.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
The workload was evenly distributed throughout the course.	3.7	1.4

The examination matched the contents and level of the course.

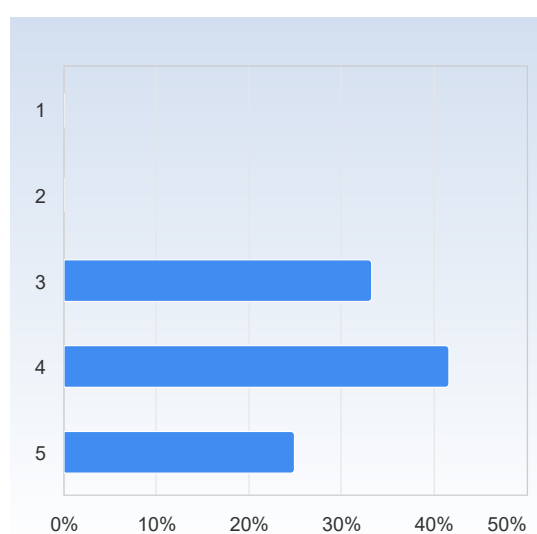
The examination matched the contents and level of the course.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	3 (25.0%)
4	3 (25.0%)
5	6 (50.0%)
Total	12 (100.0%)



	Mean	Standard Deviation
The examination matched the contents and level of the course.	4.2	0.9

Overall, I am satisfied with the course.

Overall, I am satisfied with the course.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	4 (33.3%)
4	5 (41.7%)
5	3 (25.0%)
Total	12 (100.0%)



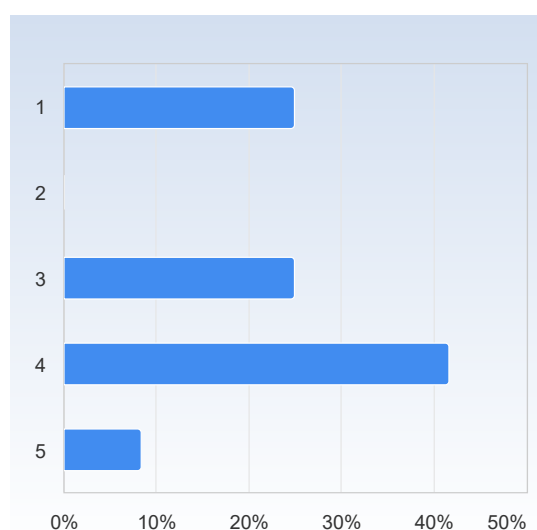
	Mean	Standard Deviation
Overall, I am satisfied with the course.	3.9	0.8

On the development of generic skills

On a scale 1-5 select the option that best matches your opinion: 1= disagree completely → 3= partly agree → 5= agree completely

The course has increased my ability to read a scientific text.

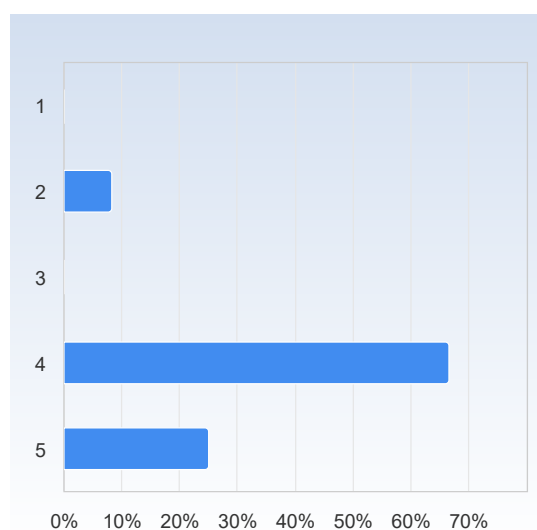
The course has increased my ability to read a scientific text.	Number of responses
1	3 (25.0%)
2	0 (0.0%)
3	3 (25.0%)
4	5 (41.7%)
5	1 (8.3%)
Total	12 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to read a scientific text.	3.1	1.4

The course has increased my ability to communicate the subject in writing.

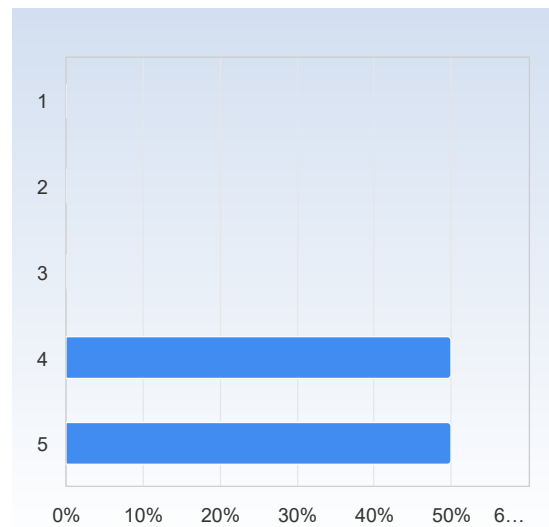
The course has increased my ability to communicate the subject in writing.	Number of responses
1	0 (0.0%)
2	1 (8.3%)
3	0 (0.0%)
4	8 (66.7%)
5	3 (25.0%)
Total	12 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject in writing.	4.1	0.8

The course has increased my ability to communicate the subject orally.

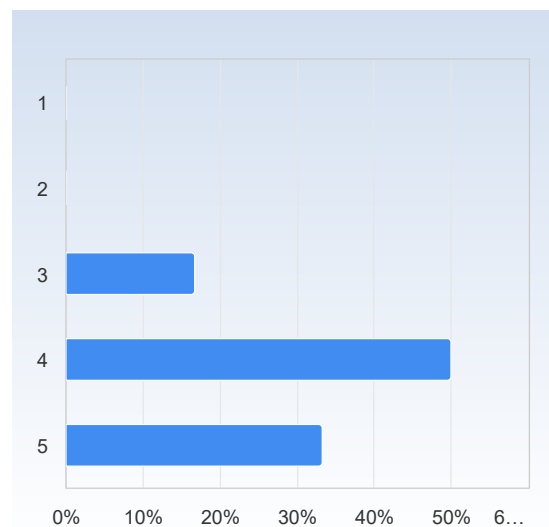
The course has increased my ability to communicate the subject orally.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	6 (50.0%)
5	6 (50.0%)
Total	12 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject orally.	4.5	0.5

The course has increased my ability to cooperate.

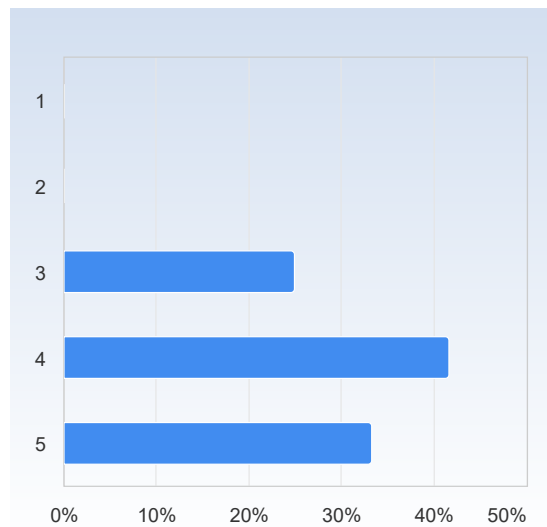
The course has increased my ability to cooperate.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	2 (16.7%)
4	6 (50.0%)
5	4 (33.3%)
Total	12 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to cooperate.	4.2	0.7

The course has increased my ability to search and process information.

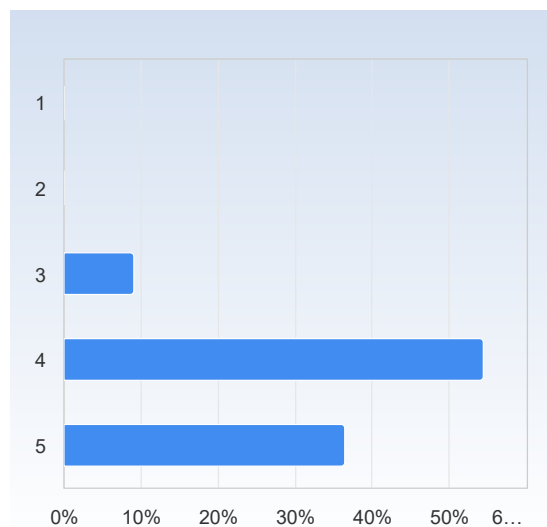
The course has increased my ability to search and process information.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	3 (25.0%)
4	5 (41.7%)
5	4 (33.3%)
Total	12 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to search and process information.	4.1	0.8

The course has increased my ability to analyze and solve problems.

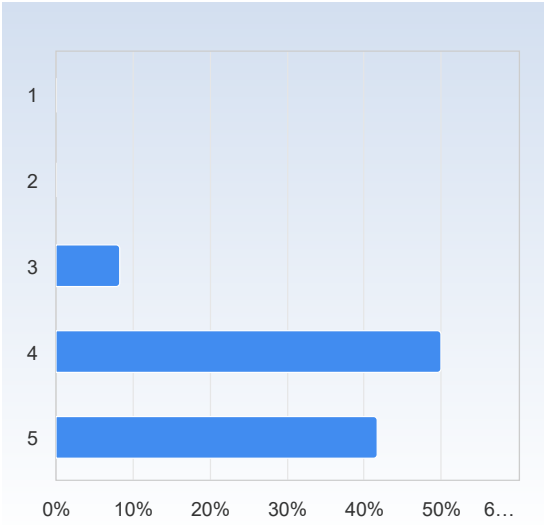
The course has increased my ability to analyze and solve problems.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (9.1%)
4	6 (54.5%)
5	4 (36.4%)
Total	11 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to analyze and solve problems.	4.3	0.6

As a result of this course, I feel confident about tackling unfamiliar problems.

As a result of this course, I feel confident about tackling unfamiliar problems.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (8.3%)
4	6 (50.0%)
5	5 (41.7%)
Total	12 (100.0%)



	Mean	Standard Deviation
As a result of this course, I feel confident about tackling unfamiliar problems.	4.3	0.7