



Course analysis template

After the course has ended, the course leader fills in this template. This is an important part of the quality assurance of the programme. The programme director decides whether the template should be supplemented with further information/questions.

Course code 5HI022	Course title Scientific Research Methods	Credits 7.5 HP
Semester VT2025	Period 2025-03-17 - 2025-06-01	

Course leader Nadia Davoody	Examiner Sabine Koch
Other participating teachers Leo Kowalski, Henrik Ahlenius, Henrike Häbel, Emma Eliasson, Ulrika Lögdberg	Other participating teachers

Number of registered students 40	Number passed after regular session 40	Response rate for course survey (%) 40%
Methods for student influence other than course survey Students were consistently asked for feedback during the course as to how we can improve all areas.		

Note that...

This analysis shall (together with a summary of the quantitative results of the students' course survey) be submitted to the LIME educational committee.

This analysis has been submitted to the LIME educational committee on this date:

1. Description of any implemented changes since the previous course based on previous students' comments

The structure of the course saw a substantial update with the introduction of a group project that spanned the entirety of the course. This project was a mini-version of a research project involving all aspects of the academic process – crafting a research question and aim, planning methods, collecting data, analyzing data, and discussing the implications of this.

As a result, the examination structure of the course was also greatly altered. Rather than five smaller written assignments to form a short report, groups submitted two longer assignments covering (1) introduction and methods of a report, and (2) results and discussion of a report.

Students also provided peer review feedback to each other. Lastly, the course was examined with a comprehensive written individual exam.

2. A brief summary of the students' evaluations of the course

(Based on the students' quantitative answers to the course evaluation and comments.

Quantitative compilation and possible graphs attached.)

16 out of 40 students have completed the course evaluation survey. 13 responders had a clinical background and 3 had a technical background. For each question of the survey, the mean, standard deviation, and coefficient of variation, as a percentage, are presented in Table 1.

Table 1. Summary of the students' evaluation of the course.

#	Question	Mean	Standard Deviation	Coefficient of Variation (%)
1	In my view, I have developed valuable expertise/skills during the course.	4.1	0.6	15.0
2	In my view, I have achieved all the intended learning outcomes of the course.	3.9	1.0	25.3
3	In my view, there was a common theme running throughout the course – from learning outcomes to examinations.	4.5	0.5	11.5
4	In my view, the course has promoted a scientific way of thinking and reasoning (e.g., analytical and critical thinking, independent search for and evaluation of information).	4.5	0.6	14.1
5	In my view, during the course, the teachers have been open to ideas and opinions about the course's structure and content.	4.6	0.5	10.8
6	Teaching was based on real examples to develop students' professional knowledge.	4.2	0.6	13.6
7	My previous knowledge was sufficient to follow the course.	4.1	1.0	24.6
8	The course was challenging enough for me.	3.4	1.2	33.5
	AVERAGE	4.16	0.75	18.55

The overall structure of the course, guided by the large-scale group project, received very positive feedback. Students reported that getting hands-on experience with actually collecting and analyzing data was very educational, and that having a project that involved the complete academic process was helpful to understand how everything fits together, preparing them for their thesis. It was also helpful with the peer review process to both give and receive feedback on the work they had done. Students also felt the course was well-structured, with mainly theoretical portions stacked in the beginning of the course and then more group/individual work towards the end where they could apply what they had learned. Students also felt the final examination corresponded well to the course content and goals.

Some improvements related to the group project and especially how other group members may cause a “free-rider” problem as well as sinking the grades of ambitious students if they don't put in as much effort. Suggestions include decreasing the amount of participants in each group so that they all have to contribute, as well as grading group projects as pass/fail and have individual assignments be graded A-F. From the teachers perspective, one improvement



may be the grading criteria, especially for the final examination, which contained some elements where it turned out it was quite simple for students to receive a lot of points. Updating these criteria would likely improve the quality of the examination and also lead to a wider grade distribution which is more aligned with the competency of each student.

3. The course-responsible reflection on the course implementation and results

Course strengths:

- Hands-on experience with designing and executing a scientific study
- Good structure and pacing, first providing theoretical information and then giving time to apply this in practice
- Examination aligns well with the course content

Course weaknesses:

- Group project with too many members given the amount of work it takes
- Examination had criteria and parts that made it a bit “too easy” to get points so that even weaker examinations got relatively high grades
- Statistical lectures did not relate to practical applications enough

3. Other comments

4. The course-responsible conclusions and any proposals for changes

(If any changes are proposed, please specify who is responsible for implementing these and a time schedule.)

The overall change to the course was very successful with the new structure of a group project working very well and being highly appreciated. In response to students' feedback, the course leader will decrease group sizes for the group project. They will also encourage statistical lecturer to include more practical examples in their lectures. Additionally, will provide more feedback and dedicate some class-time towards the peer review process and how to do this well. The grading may change, possibly to a pass/fail system for group assignments (though this requires some more thought) as well as updated the grading criteria for the final exam.