

Course report Faculty of Technology and Society

This course report is based on student feedback and submitted course evaluations, exam results and the teacher's idea for further development. The course report is published on the course website and Canvas-site.

Course name	Research Methodology, Data Analysis, and Visualization
Course code	DA611E
Semester	Ht-2025
Number of	27
registered students	
Course coordinator	Jimi Nilsson

X	Course report is published on Canvas-site
	Course report is published on course webpage

Compulsory course evaluation

The compulsory course evaluation has been conducted through:

	Standard template via Reflex	
	Extended standard template with own questions via Reflex	
X	Own evaluation method by the course coordinator	
If o	 ewn evaluation method was conducted, describe how: Evaluation in smaller groups on the last day of the course + an individual evaluation online (form) 	

Additional evaluations that were conducted during the course

	Separate survey
	Oral evaluation in class
	Oral evaluation in smaller groups
	Other evaluation method
If other evaluation method was conducted, describe how:	

Comments on the course evaluations

Write comments here

Work methods and workload

Work methods:

- Most assignments were individual, but the students experienced it being a good balance between individual assignments and group work, especially having group discussions during seminars and getting inspiration from colleagues' work.
- The students seem to prefer individual work. Several students point out that they prefer individual work due to bad experiences of working in groups during their previous years.

Workload:

- Two different opinions: One group of students thought it was too easy; the other group of students thought it was too much, especially the final assignment (the research proposal), and would have liked to have it presented earlier in the course (it was presented three weeks before deadline, one week before the planned introduction).
- Office hours were very good as an opportunity to ask questions about the course
- A minority of students felt it was too much to submit preparation data before non-mandatory lectures because it created stress
- Most students felt that the overall workload was manageable

SUGGESTED CHANGES (for discussion on improvements)

- **WORK METHODS:** Combine the two quantitative seminars analysis and computational method into one seminar
- WORKLOAD: Keep the office hours to have the opportunity to meet up with teachers and ask questions once a week (outside lectures and seminars). Many students turn up at office hours on Zoom as it is easier to connect online

Lectures and seminars

The relevance of the lectures and the seminars:

- Overall very good, especially the relevance to the seminars and the final assignment.
- Content relevant for the assignments, although it is suggested to have even more method lectures
- The 'hands-on' workshops in class helped a lot to understand how to approach the assignments
- Mandatory seminars are good because you're forced to prepare and read the literature

The organization/order of lectures

■ In general positive – a logical order. Some students suggest changing the order and put the visualization/computational method period earlier in the course and connect it to the quantitative method period.

• Students suggest that lectures on literature review, the research question, and the research design (academic writing) should come earlier in the course

SUGGESTED CHANGES (for discussion on improvements)

- Make space for more workshops because it helps the students discuss their assignments
- Two different parallel tracks during the course: one for the actual contents, methodology, and one for academic writing (research design, research question etc.)
- Reorder the lecture/methodological periods.
- Add a lecture on why certain methods work better than others for a specific topic or context (the academic track)

Assignments and the final report

Seminar assignments

- Some seminars felt stressed and teachers didn't have enough time to present their assignments
- The seminars were very helpful in preparing for the final assignment
- The seminars as a form of assessment were appreciated because they took some pressure away. Submitting assignments comes with pressure.

Home assignments

- Both assignments were much appreciated, especially the workshops before the assignments and the seminar after the assignment was submitted.
- Workshops enabled deeper understanding of methods (visualization/computational method and interview method)
- Some software and coding techniques were completely new and some students wished they would have more time
- Hands-on assignments (workshops + home assignment) and seminar assignments including preparations made for a great balance between assignment types.

Final assignments

- Very relevant as it was clearly connected to everything in the course
- Very relevant in relation to the course objectives
- It closely ties in with the assignments and seminars, like a natural end of the course
- Would have been good to get an earlier start to the final report.

SUGGESTED CHANGES (for discussion on improvements)

- Distribute the research proposal (final assignment) over the course and introduce parts of the proposal in bits and pieces
- Find a better way to integrate the data visualization part in the research proposal because it's hard to find data on topics, especially when there's no time to collect primary data
- Remove the word count in the research proposal because it a) creates stress,
 b) was too much
- Grading matrices are not necessary as long as we get feedback. They tend to be about 'ticking boxes' of contents.

Examination results

X	Examination results are as expected
	Examination results are not as expected

Few students submitted in the first round but the results are comparable to the former research methodology course at the former master's programme

Recommendations and priorities for the course development

- Reorganize the course to get a better continuity of the different types of methods. Connect the quantitative and computational methods weeks
- Create parallel 'content tracks': Methodology and academic writing tracks
- Introduce different parts of the final report/assignment (the research proposal) in bits and pieces early in the course, and connect these to different parts of the academic writing track (and the seminars)

Instructions

The instructions part of the course report is only intended as support for the course coordinator to create the course report and the pages below are to be removed before the publication of the report.

Course name refers to the complete course name as listed in the syllabus, e.g. Computer Science: Research Methodology or Introduction to Programming and Embedded Systems.

Course code refers to the identification code of the course, e.g. DA350A or MT158A.

Semester refers to the semester that is referenced in the course report, *e.g. Spring* 20 or Autumn 19.

Number of registered students refers to the number of registered students three weeks after the start of the course (meaning the number of registered students after early withdrawals).

Course coordinator refers to the name of the teacher who is the course coordinator and who is responsible for writing the course report. The names of other teachers who may have been involved in the implementation of the course and compilation of the course report are not stated in the report.

It must be registered in the course report that it is published on the course website and the current course's Canvas page. This is filled in by the person responsible for the publication of the report.

Course evaluation

Number of responses to compulsory course evaluation refers to the number of students who submitted a course evaluation or who actively participated if an alternative evaluation method was used (this section is to be filled in by the study administration if the course evaluation is carried out by the study administration via SSR).

Compulsory course evaluation has been conducted through refers to the approach that has been used for the course evaluation. The chosen approach is indicated by checking one of the three listed options — only one option should be checked:

- Standard template via SSR (Sunet Survey and Report): This is the template that is set up by the study administration unless the study administration for the course has been instructed otherwise. Check this option if you used the standard template via the study administration without making any adjustments.
- Extended standard template with own questions via SSR: Check this option if you have extended the study administration's standard template with your own course-specific questions. The added questions do not need to be reported here. They are archived as part of the course evaluation.
- Own evaluation method by the course coordinator: Check this alternative if the course evaluation has not been carried out using one of the two alternatives above. The course evaluation has been set up by the course coordinator without the study administration. In this case, the course coordinator is also responsible for summarising and compiling the course evaluation. If the course coordinator has chosen their own method to conduct the course evaluation, the method must be described briefly. The specific questions do not need to be reported here but must be reported in the course evaluation summary which is done by the course coordinator. E.g. The course evaluation has been conducted anonymously on paper in connection with presentations at the end of the course or The course evaluation has been conducted anonymously with Mentimeter in connection with the lecture in week 22.

If any additional evaluations have been conducted, they are reported as described below. It is not necessary to carry out additional evaluations. If no additional evaluations have been conducted, this section is left blank.

Additional evaluations that were conducted during the course refers to any other organised evaluations aside from the compulsory course evaluation that might be included in the course report. "Organised" in this case means that the evaluation has been announced to the students in advance, so that they know that an evaluation is

taking place and that they will have the opportunity to express their opinion at this occasion. This section does not refer to any spontaneous discussions with students or viewpoints given that may have taken place and that are included in the course report, instead this section only refers to any additional, formally organized evaluations, where students were given the opportunity to evaluate the course. There are four options — it is possible to check more than one option:

- *Separate survey* refers to whether one or more formally organised surveys have been conducted that involve some form of course evaluation. Surveys can be conducted digitally, via e.g. Canvas or Mentimeter, or by handing out paper surveys.
- *Oral evaluation in class* refers to whether there have been one or more formally organised opportunities for students to give oral feedback and/or to discuss their opinion on the course in the whole class.
- *Oral evaluation in small groups* refers to whether there have been one or more formally organised opportunities for students to give oral feedback and/or to discuss their opinion on the course in smaller groups than the whole class where each student has more space to express their opinions.
- Other evaluation method refers to any other formally organised evaluations that may have been carried out in another way than the three alternatives listed above. If so, the method needs to be described briefly.

Comments on the course evaluations means that the course coordinator must comment on the results of the course evaluations. The comments are aimed at current and future students on the course. The reader can be expected to have knowledge of the course's structure and organisation. It is therefore not necessary to explain the different course activities (or similar) in the comments section. Relevant things to comment on are, for example, whether there were any unexpected evaluation results or whether there are any results or occurring criticism that may need to be explained or put into context.

Examination results

Examination results refers to results from all types of examinations that have been conducted on the course (e.g. in-class exams, laboratory work, assignments, etc.). Indicate whether the examination results were overall as expected or not.

If some types of examinations differ greatly in how they turned out in relation to the expected result (for example, the expected number of students passed a written exam but only a very low number of students passed an assignment), then both options can be checked. If the examination results deviate from what was expected, it must be commented on and indicated what reasons might be responsible for the deviation. Even in cases where the examination results are as expected, it might be necessary to comment if there are special aspects that need to be highlighted.

Recommendations and priorities for the course development

Briefly state which recommendations and priorities should be made for the upcoming course based on the results of the course evaluations and in relation to the examination results.