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	**Data Analysis and Visualization**
Course code	ME659E
Semester	HT24
Number of registered students	10
Course coordinator	Georgios Palamas

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

Compulsory course evaluation

Number of responses to the compulsory course evaluation	2

The compulsory course evaluation has been conducted through:

X	Standard template via SSR (Sunet Survey and Report)
	Extended standard template with *own questions* via SSR
	Own evaluation method by the course coordinator
If own evaluation method was conducted, describe how:	

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

This course is designed to help students develop a holistic understanding of data analysis workflows and leverage data visualization for effective decision-making. While we use a popular analytics tool throughout the course, the primary goal is to teach students how and when to apply these methods without becoming dependent on a single platform.

Independent Learning and Resource Provision

Some students mentioned they had to learn the tool on their own, which aligns with the course's plan for outside-class study. From the outset, we provided various resources, including a dedicated video lecture from a previous instructor to guide students in learning the tool at their own pace. During class sessions, we focus more on concepts rather than exhaustive, step-by-step tutorials, encouraging flexibility, adaptability, and independence.

Enhancements Based on Feedback

Hands-On Workshops: While independent learning remains central, we recognize the need for additional guidance. We will introduce one or two workshop-style sessions devoted to learning and practicing key features of the tool. These practical exercises will help students gain confidence and bridge the gap between conceptual understanding and real-world application.

Clear Communication of Aims: To better align expectations with course objectives, we will devote more time at the start of the course to explain the overall goals, the intended balance between conceptual learning and practical proficiency, and how to make the most of the provided learning resources.

Examination results

	Examination results are as expected
The exam results were as expected, indicating that students generally achieved the intended learning outcomes.	

Recommendations and priorities for the course development

1. **Incorporate More Practical Examples and Activities**
   - **Rationale:** Students requested additional exercises to better grasp complex topics, indicating a need for interactive, hands-on learning.
   - **Action:** Introduce case studies, simulations, or short activities to reinforce theoretical knowledge.
2. **Clarify Grading Criteria**
   Provide a clear rubric or sample answers for major assignments and exams , brief Q&A sessions or discussion boards to address questions.
3. **Feedback Collection**
   - **Rationale:** Only two students responded, potentially limiting the accuracy of the overall evaluation.
   - **Action:** Emphasize the importance of feedback to improve student engagement.
4. **Review and Adjust Course Pace**
   - **Rationale:** One student felt the pace was too fast at times.
   - **Action:** Incorporate short check-ins or summary segments mid-session to ensure key points are fully understood before moving on.

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.