Course analysis (course evaluation)

Course code	Course title	Credits
4NT003 Part 1	Public health disease monitoring, large scale data collection, analysis, and data visualizations	7

Semester	Period	
Spring - 2024	First period (15 Jan – 13 Feb)	

Course coordinator **Ioannis Ioakeimidis**	Examiner Magdalena Rosell
Teacher in charge of component Ioannis Ioakeimidis	Other participating teachers Billy Langlet, Vasileios Papapanagiotou, Emma Patterson, Ellinor Nilsson, Christina Alexandrou, Kosmas Dimitropoulos, Christos Diou, Anders Eriksson, Maria Vasiloglou, Fernanda Roca

Number of registered students during the three week check 32	Number approved on the last course date **32**	Response frequency course valuation survey 46%
Other methods for student influence (in addition to concluding course valuation) Oral discussions with participants during the course. Oral course evaluation with the student representatives after the end of the course.		
Feedback reporting of the course valuation results to the students The students were informed via an announcement in Canvas		

1. Description of any conducted changes since the previous course occasion based on the views of former students

The course is given for the 2nd time. Since last year the duration of the course has been increased to 7 credits from 5 that it was before. The content of the course has been adapted and expanded based on the last years evaluation, mainly towards stronger practical trainings training on data analytics, using R Studio and Python, based on the last year's feedback from the students. The learning outcomes were also revised to reflect the above. The examinations were also revised accordingly: this year we introduced 3 smaller exams, one relevant to the theoretical content of the course, one relevant to the analytical skills taught and the final one a combination of the two, here students created a relevant scientific poster, with custom data visualisations. We also introduced a self-reflection checklist for the individual theoretical exam and one peer-reflection report where students got to reflect on one another's report. Finally, we added two additional external guest lectures from international experts, relevant to different domains of behavioural monitoring and population monitoring.

2. Brief summary of the students' valuations of the course

Overall, students were satisfied with the course, with the students expressing the opinion that they developed valuable skills on a satisfactory level [13% - 53% and 33% rated "to a very large extent", "to a large extent" and "to some extent", respectively]. All questions in the course evaluation were rated equal or more than 3.5 in the 1-5 scale, except the rating for the "common theme" running through the course, which was rated 3.3 in average, with the students noting a relative disparity between the theoretical and the practical components of the course. The point above was confirmed through the oral discussions and the oral course evaluation with the student representatives. This is, obviously the main component to improve

during the following year through better integration of the practical data analysis trainings within the theoretical framework of the course.

3. The course coordinator's reflections on the implementation and results of the course

Strengths of the course: Overall, the course was improved in comparison with the last year, with the newly introduced data analysis trainings being very well received (the students requested even more extensive trainings in Python and general programming principles). The newly invited external lecturers were well received. The new structure of the course, with regards to the frequency and types of exams, the frequency and the type of communications to the students and the distribution of the workload during the course, worked much better, The increase from 5 to 7 credits was also justified, based on the additional learning outcomes and the additional content.

Weaknesses of the course: I would agree with the main feedback that we received by the students. The technical trainings still seem a bit disconnected with the theoretical background and it might have been a challenge for the students to "change speeds" from one lecture to the other, going from workshops on programming to discussions relevant on nutritional epidemiology.

4. Course coordinator's conclusions and any suggestions for changes

Based on the feedback and the analysis above, changes that will be done for next year are: We will introduce more relevant raw datasets for analysis within the theoretical framework of the course. These will be introduced early in the course and their structure relevance will be discussed on a theoretical level before the students will be required to work on the included data. Next year we will also adapt the extent of certain theoretical components according to specific feedback we received by the students orally. The exam structure will be kept as is, but we will explore ways to individualize the effort for the end-exam of the course, since students felt that the group-level presentation of the scientific posters became repetitive.