

COURSE ANALYSIS: AG2144 SUSTAINABLE URBAN MOBILITY, HT 2022

DESCRIPTION OF THE COURSE EVALUATION PROCESS

Describe the course evaluation process. Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.

The teacher team emphasised throughout the course that this is still a “young” course, given for the second time, and that we were eager to know students’ thoughts and opinions. A post-course evaluation rendered 29 % (11/38) participation. Students also had the opportunity to give feedback in an informal discussion at the end of the course; however, only three students participated. Finally, course contents, structure and methods were discussed informally with students at various occasions during the course, such as after lectures and in seminars.

No students with stated disabilities responded to the online course evaluation. With respect to gender, only 4 out of 21 questions in the questionnaire differed more than one (1) at the scale of 1–6 between the male and female respondents. The male respondents graded lower that they were given opportunity to work with their own ideas (4 male vs. 6.7 female) and concrete examples (4.7/6.1), that they had sufficient previous knowledge to benefit from the course (5.3/6.4), and that they could influence the course content (3.3/4.6). Given the two open-ended responses about balanced perspectives and fair participation, supported by the impressions by the teacher team, we do not feel any need to comment any further on aspects of gender or disability.

DESCRIPTION OF MEETINGS WITH STUDENTS

Describe which meetings that has been arranged with students during the course and after its completion.

No special meeting has been held with students to discuss the course. Students were invited to an informal post-course evaluation meeting, but with a very low turnout (3/38).

COURSE DESIGN

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

The course consisted of nine lectures organised in three “blocks”, each block finalized with a short literature reflection (P/F) and a seminar (mandatory attendance). Mid-way through this rather intense period of lectures and seminars, students started working on a written group assignment (graded A-F). The course ended with an individual written assignment (also graded A-F).

In the previous and first round of the course, the assignments started only after the lecture/literature blocks had finished. This year, the two “parts” of the course overlapped a bit in order to give students the opportunity to think with their group assignment already when reading the course literature.

Three out of nine lectures were new compared to last year, depending on small changes in content and availability of lecturers. Some readings were replaced and the number of mandatory readings were somewhat reduced compared to last year.

THE STUDENTS' WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If these is a significant deviation from the expected, what can be the reason?

This is a 7.5-credit course running during one period, which means students should ideally work halve-time with the course, or ca 20 hours/week. With only 27.3 % of the students spending around that time (18–23 hours/week), and a sizeable percentage (39.5 %) considerably lower than that (6–11 hours/week), it appears as if the workload is too small. However, the open responses seem partially to counter this conclusion. There, several of the students (even those who responded as having spent few hours per week on the course) found the workload intense, not least due to many readings in the first

part and the laborious written assignments in the latter part. Our informal discussions with students give us the same impression, that many felt it was a rather demanding course. We thus suspect that at least some students may have reported the number of hours spent in classroom (lectures, seminars, workshops), but not those spent on reading course literature and writing seminar reflections and the group and individual assignments. Alternatively, students were unaware about the amount of time they were expected to spend on the course.

THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

The students' grades on the overall course (graded A-F) were: 7 A, 12 B, 9 C, 10 D, 0 E. One student failed (F) on the final individual assignment, but already passed on re-assignment. (38 students in total.) Grades were somewhat higher than last year. One reason for this might be that this year's students came from a variety of master programs, with more students having a background in social science and thus more accustomed to the perspectives and approaches that dominate the course. Last year, almost all students were from the Transport, Mobility and Innovation programme, EIT Urban Mobility; this year these students formed roughly a third of the cohort; another third came from the Sustainable Urban Planning and Design programme; while the last third came from other programs or were independent exchange students.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What do students say in response to the open questions?

Among the pros with the course, students mentioned that lectures were interesting, of high quality, and with good mix of content; that the literature was interesting and worthwhile; that the seminars were good opportunities for trying out theoretical thoughts and get feedback; and the collaborative parts of the course (hence working on group assignment and seminar discussions). Several students commented that the course made them think about the topic of urban mobility in new ways, adding novel perspectives and widening their horizon. ("I think the course really gives different and important perspective that should not be omitted in a more technical programmes." "I really liked the social aspect of many readings and how mobility affects us. Coming from an engineering background, this broadened my horizon." "Honestly, the best course I've taken at KTH")

Things that the students thought could be improved included some lectures, especially some of those given by guest lecturers, which were found disconnected from the overall course, and that seminars could be more structured. The heaviest criticism related to the written assignments. Students found the instructions and the criteria for the assignments unclear/insufficient; that the scenario part of the group assignment would have called for some preparatory course occasion; that the individual assignment would have been facilitated by some opportunity to get feedback along the way; and that the assignments could have been introduced earlier in the course to allow for an earlier start and for ironing out ambiguities in the instructions. These are, we feel, relevant criticism that we bring with us to the next course round.

Regarding advice to future course participants, this year's students particularly stress the importance of getting started reading the course literature immediately in order to make the seminars useful; they highlight the reading as hard work but rewarding. Some also mention to get started with the assignments on time and to read the grading criteria carefully to know what is expected.

SUMMARY OF STUDENTS' OPINIONS

Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

The students who responded to the questionnaire (11 out of 38), gave average scores between 4.2 to 6.7 on the 22 included statements (where 1 refers to total disagreement, 4 neutral, and 7 strong agreement). These students particularly agreed to with statements that they got to work with interesting issues (6.7), that the course was challenging in a stimulating way (5.8), that they experienced an open and inclusive atmosphere (6.5), that they understood what the teachers were talking about (6) and that understanding key concepts had high priority within the course (6), that

they received regular feedback that helped them see their progress (5.9), that their background knowledge was sufficient to follow the course (6), and that they were able to learn by collaborating and discussing with others (6).

The lower scores (although still higher agreement than “neutral”) were given to statements about understanding what was expected to learn in order to obtain a certain grade (4.7), that they regularly spent time on reflecting on what they had learned (4.8), and that they had opportunities to influence the course activities (4.2)

In an attempt to summarize the above, we would highlight that (these) students particularly appreciated the overall content and usefulness of the course and how it pushed them ahead in their conceptual understanding of the topical subject (sustainable urban mobility), as well as allowing and constructive learning environment of the course. In terms of room for improvement, (these) students pointed to issues such as more clarity of instructions and grading criteria, more room for reflection and exploration. On the whole, this corresponds to our impressions from meeting students during the course.

OVERALL IMPRESSION

Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.

Our overall impression is that—in spite of it being a relatively new course—students appreciated it. This is reflected in the questionnaire responses and our informal talks with them. Students also performed well in terms of grades. Some students found the workload high, especially with respect to the expected course readings, which is on the other hand countered by the rather limited number of hours/week some students spent on the course.

The main change compared to last year was that we started the assignments before the lecture/reading blocks had ended. It is difficult to assess what impact this really had. At least one student really felt the assignments should be introduced even earlier, whereas other students (informally) suggested the different course section be clearly separated so as to do one thing at a time.

ANALYSIS

Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason be? Are there significant differences in experience between:

- students identifying as female/male?
- international/national students?
- students with/without disabilities?

We will here focus of the weaker areas with room for improvement. Students request greater clarity in the instructions and criteria for, as well as opportunities to train in central aspects of and get feedback on the written assignments, and more organised seminars. These requests can, we think, be accommodated. Students also expressed some limitations in terms of own reflection and ability to influence the course activities (among lowest scores but above “neutral”). We will discuss ways to develop the course in this regard until the next course round, yet feel that it is challenging to design a course that allows students to influence course activities to any large extent; and also that the course actually allows for quite some degree of reflection (in seminars, not the least). One possibility would be to allow students to select cases for the written assignments more freely (they are now pre-formulated); another to have students prepare and lead seminar discussions; a third to have students write a short note on Canvas about what they learned after a few of the course activities.

We don't see any significant differences in experiences of different students.

PRIORITIZED COURSE DEVELOPMENT

What aspects of the course should be developed primarily? How can these aspects be developed in short and long term?

The following adjustments will be made or considered in the short term:

- Review instructions for written assignments
- *Consider* course occasions to train abilities required in assignments (e.g. scenario making—alternatively to specify in instructions and communicate better the expectations concerning scenarios)
- *Consider* the possibility for student's own case selection/formulation in written assignments
- *Consider* to introduce the written assignments earlier in the course
- Prepare more organized seminars and/or to have students prepare and lead seminar discussions