

## **Course evaluation template**

After the course has ended, the course leader must fill in this template. The program director and education management will use your reflections to make adaptations to the program and/or the next time the course is given. The reflections will also be posted on the program web for students to read.

Course code 4FH090	Course title Theories of Science 4FH090	Credits 2,5 hp	
Semester VT25	Period 20250120-20250129	129	

Course leader	Examiner	Examiner	
Melody Almroth	Melody Almroth	Melody Almroth	
Other participating teachers	Other participating teachers	Other participating teachers	
Vera Atarodi	Andreas Lundin		
Kuan-Yu Pan	Mattias Ekman	Mattias Ekman	
Daniel Falkstedt	Jeffery Casely-Hayford	Jeffery Casely-Hayford	

Number of registered students	Number who have not completed	Number passed after regular
	the course <sup>1</sup>	session <sup>2</sup>
57	5	52

#### Methods for student influence other than course survey<sup>3</sup>

Continuous chances for discussion during lectures and applied activities, asking for reflections after group work sessions, oral feedback session on the last day of class where students had the opportunity to say what they thought went well and what could be improved,

#### **Conclusions from the previous course evaluation**

- Though the course evaluation was slightly lower overall than last year, I still feel that it was overall quite positive.
- Because the students expressed not feeling like they had enough time, I will not add any course content for next year, and I will try to assess the reading schedule to try to spread out the reading so that they don't have too much on the first day.
- There is not much to do about the length of the course. It is a major challenge to try to cover theory in eight days.
- I think the essay is a good form of evaluation and I hope to continue with it.

<sup>&</sup>lt;sup>1</sup> At the time of completed grading and mandatory assignments/revisions.

<sup>&</sup>lt;sup>2</sup> After first summative examination.

<sup>&</sup>lt;sup>3</sup> State: how the students were given the opportunity to participate in the preparation and decisions at course level, how the students were given the opportunity to provide feedback on the course and how this forms the basis of the analysis and proposals below, response frequency (for example, concluding survey 70 % response frequency, post-it notes – improvement suggestions after the second course week 90 % response frequency, course council 85 % attendance).

#### Description of conducted changes since previous course occasion

- In response to comments from last year, I changed the schedule slightly so that on the first day, the students had the entire afternoon to do their reading for the philosophy of science session the following day. I moved the lecture that would have been on that afternoon to Friday of that week, which had previously been reserved for independent study.
- The constellation of teachers also changed slightly due to scheduling, but four of the six teachers had previously been involved with the course.
- I kept the examination as is, and did not add any new content to the course (besides some updates and slight adjustments).
- This year's cohort was very large (nearly 60 students), so some things had to be adapted. For example, the philosophy of science presentations were done in two parallel sessions instead of with the whole group, which I think worked great. I also had grading assistance from several of the other teachers, though I still read all essays and assessments.
- I was clearer on how they should prepare for the applied theory workshop. That is, that they should be prepared to present and explain the article and discussion questions to their peers who had not necessarily read the same article.
- The students were required to provide an AI statement in their essays explaining if and how they used generative AI in writing their assignments.

### Summary of the students' response to the course valuation

- Overall, the evaluation was similar to last year, if not slightly better, with most questions receiving around 4 out of 5.
- The highest scores were given for the teachers being open to ideas and opinions about the course's structure and content, the students being provided with the same learning opportunities, and the atmosphere being good during the course.
- The lowest scores were given for the students, feeling that they had enough time to reflect on what they learned (3.1) and reflect on ethical issues in diverse situations (3.3).
- The open feedback questions were also quite positive, with several saying that they really enjoyed the course.
- As in other years, some students comment that the course is too short to really absorb the complex topic of theory.
- Some constructive feedback related to the instructions to the essay being too vague, difficulty in the larger group discussions, and a suggestion for some examples outside of the European/North American perspective.
- Though not on the course evaluation, some students found the criteria for pass with distinction to be too vague.

# The course leader's reflections on the implementation and results of the course

• As usual, the diversity in the students' academic backgrounds makes it difficult to find an appropriate level for the course. Some will always find it too difficult while others will find it too easy. Using the same philosophy of science instructor for the introductory course is one attempt to try to lay the same foundation for the students and then to build on this. Peer group activities also help the students learn from each other and their own unique backgrounds and experiences.

- The students have a variety of learning activities including foundational lectures (3), examples of theory in research (3), and applied seminars and workshops in small groups (4). They are also assigned a variety of literature and write one reflection and one essay during the course. I think that the students appreciate this variety and are able to see the connections between the different activities.
- Though we are still trying to adapt to the new world of generative AI, I still think that the written essay is the most appropriate form of examination for this course. Based on the AI statement provided in the essay assignment, many students seem to use these tools to better understand complex concepts and to improve their writing skills, which I think is positive. However, because of the widespread use of these tools, I think that our grading standards for pass with distinction may have been raised significantly, which is something that I need to reflect on.
- One thing that I noticed this time is that the attendance was very poor during the non-mandatory sessions with only around 30% of students attending these lectures. This is unfortunate because all course activities are carefully planned as a complete package. The quality of the course is much lower for everyone if students only attend the mandatory sessions. I have not had this problem to this extent previously. Based on previous feedback, I have given the students more time for their essays by putting the instructions up on Canvas from the first day of the course. I worry that this may deter students from coming to class because they prioritize writing the essay instead. On the other hand, this class was unusually large, and maybe that affects the group dynamics and motivation to come to class.

## Course leader's conclusions and suggestions for improvement

- In general, I found that the course and the feedback were very positive and that things are working well in the course.
- The course is very short, and I will not add more concepts or material. I also hope to keep the same constellation of teachers. However, I will try to include more examples outside of Europe and North America when possible.
- I will continuously evaluate the essay assignment and the grading criteria in the context of the widespread use of generative AI tools.
- I will consider making the pass with distinction criteria more specific for both the students and the evaluators. Though there was very high grading agreement between evaluators, I will reflect on how to be more transparent about how we assess the essays. The criteria for passing is clearly outlined, but the pass with distinction criteria is less explicit.
- There were some issues that came to my attention because the group was so large this time. If the next group is equally large, I will reconsider if and how some wholegroup sessions are conducted.
- I will watch and see if the low attendance problem continues during the next time the course is given.

#### Other comments