



## 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.

<b>Course code</b> 4FH099	<b>Course title</b> Systematic Review and Meta-Analysis	<b>Credits</b> 3.0
<b>Semester</b> HT25	<b>Period</b> Oct 30 – Nov 12, 2025	

<b>Course leader</b> Elizabeth Arkema	<b>Examiner</b> Elizabeth Arkema
<b>Other participating teachers</b> Teaching assistants: Ngoc Nguyen, Alvaro Gomez Gonzalez, Anna Maria Lampousi	<b>Other participating teachers</b> From KIB: Ingrid Andersson, Andreas Jacobson

<b>Number of registered students</b> 32	<b>Number who have not completed the course<sup>1</sup></b> 0	<b>Number passed after regular session<sup>2</sup></b> 32
<b>Methods for student influence other than course survey<sup>3</sup></b> I asked the students throughout the course to provide feedback to me or to the other participating teachers. I received feedback and comments from students in person and via email and also via the other teachers. After sending out the grades I asked if anyone would like to meet to discuss the exam or the course in general to contact me. One student contacted me to discuss the exam and we met over zoom for an hour.		

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

<sup>2</sup> After first summative examination.

<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).

## Conclusions from the previous course evaluation

- The statistics lecture was too dry and too long, it needs more interaction.
- We need dedicated time to discuss meta-bias.
- Main questions should be developed for the journal club so that certain topics are gone over equally in all groups.
- Split the exam into two pieces, one that is a “half a protocol” and then an in-person exam on the last day where they evaluate the text of a systematic review and meta-analysis from the literature.

## Description of conducted changes since previous course occasion

The statistics lecture was given by Anna Maria Lampousi this year and it was a good fit for the students in terms of the content and aimed at the learning outcomes for the course. She

also included an interactive part where the students could use excel to estimate a pooled odds ratio on their own. This was a good addition and we will keep it for next year.

The statistics lecture was shorter than previous years so I was able to have some dedicated time to discuss meta-bias. This resulted in the students having a better understanding of it and it was clear as most of them included it in their final exam and described it correctly.

I created a document for all of the teaching assistants with a list of points and questions to cover for the journal club article. The teaching assistants thought that this was helpful and it helped to make the discussions a little more consistent across groups.

I did not have time to split the examination into two pieces for this course.

This year we ended up not having the KIB workshop until day 3 of the course, which was later than previous years. However, it resulted in the students being more ready with a research question and having read the material ahead of time, so we got more out of the workshop. The librarians used the time well and prioritized the parts that are needed to reach the learning outcomes for the course.

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

We received 25 responses to the survey sent out to 32 people (78% response rate). The survey results are attached. The students rated the course highly – the majority felt that the course was designed in a way that provided opportunities for active learning, and that they felt included and respected during the course. The majority also thought that the course as a whole was good and that the course was appropriate to the intended learning outcomes. We got our highest marks, with 76% of the respondents saying they “totally agree” that the teachers were able to support their learning during the course and that there was a good atmosphere during the course. Many of the comments mentioned that they liked the discussion part of the course, and that the teachers were engaged and open for questions.

We got slightly lower ratings for the statement “I feel that the workload during the course was reasonable in relation to the extent of the course/number of credits awarded”.

Almost all the respondents mentioned that they would have liked a longer course to really understand the concepts. Many suggested that by making the course longer, it would improve the course. They felt the work load was more than expected.

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

Overall, the course went very well this year. It was a little different to have 32 students rather than the 20 students we've had in previous years. I increased the number of teaching assistants and groups, and it took me longer to give feedback and grade their exams. However, the atmosphere was improved because when students didn't show up for non-mandatory sessions, the room did not feel so empty.

The learning activities are very nicely in line with the learning outcomes, and the students appreciate feedback from peers and teachers on their final exams before they submit them. The journal club was appreciated, since they really get to understand the pieces of a systematic review, and they use that knowledge to write their final exam. The discussion

where we grade a protocol was also appreciated since it helps them to understand what we are looking for (set expectations) for the final exam.

The students feel that the course is too short, which is what they say every year. This is probably because the pace is quicker compared to their previous courses which are over longer periods of time. However, we have a high expectation for the final exam and this program is supposed to be full time. Several students have mentioned that they have a job and about 30% didn't show up for the non-mandatory sessions, so if they felt behind it was probably because they didn't come to class. Nevertheless, to address the issues with not having enough time, we will try a different way to examine their knowledge next year.

After reading the final assignments, there appeared to be no major misunderstandings and all students reached the learning goals for the course. There are some students who could still use some practice with weighing epidemiological biases affecting their study. I provided detailed feedback on all of their assignments and this has been a nice learning opportunity for students.

### **Course leader's conclusions and suggestions for improvement**

Several of the changes we made this year I will keep for next year. I will continue to have a document accompanying the journal club article, Anna Maria will give a more interactive statistics lecture, and the KIB workshop will take place on day 2 or 3 of the course rather than day 1.

Part of the course's learning outcomes is to develop a research question for a systematic review and meta-analysis. Given that the course is so short, I would like to remove this learning outcome and focus more on the methods of answering a question. This will also decrease the burden on the students to come up with their own research question, which needs to be done as quickly as possible so that they can keep up with the assignment. We will have them find an already written protocol on Prospero based on whatever topic they are interested in, and evaluate it. These protocols are usually not very detailed, and they can expand on them with more detail through explaining why decisions were made and weighing strengths and weaknesses to apply their knowledge from the course to a protocol.

It has become harder to tell if students are using artificial intelligence to complete the final assignment. I don't think that it was a major problem, but for next year I will have an in-person exam on the last day to test whether they have reached the learning outcomes. This will also help to make the final exam anonymous, since I would like to stay unbiased as an examiner and it has been hard since I get to know the students through their topics during the course.

### **Other comments**

AI is a tool that will be used more and more in systematic reviews and meta-analysis. KIB discussed some tools and how AI can and can't be used for literature searching and data extraction. AI use in systematic reviews could be added as a part of a lecture or a reading, to keep the course up to date.