



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 4FH089	Course title Applied Epidemiology 1	Credits 5 hp
Semester VT25	Period 20250130-20250221	

Course leader Malachi Ochieng Arunda	Examiner Malachi Ochieng Arunda
Other participating teachers Anna Borgström, (KI, KIB) Marie Hasselberg, (KI, GPH) (missed due to illness) Anna-Mia Ekström, (KI, GPH) Suzanne van der Werf, (KI) Lode van der Velde, (KI, GPH) Davide Valentini, (KI, BCM) Felix Chilunga, (Amsterdam University Medical Center) Kaloyan Kamenov, (WHO)	Other participating teachers

Number of registered students 33	Number who have not completed the course¹	Number passed after regular session² 33
Methods for student influence other than course survey³ <ul style="list-style-type: none">• Student feedback was continuously gathered throughout the course. The students decided themselves on how to manage group assignments.• Students were also encouraged to communicate directly with the course leader or other instructors, either in person or via email—for individual or group concerns.• For broader issues, the class representative served as a point of contact. Both the ongoing oral feedback and the formal course evaluation offered valuable insights into the course content and structure.• The response rate for the formal evaluation survey was 51.5%. Of these, 65% responded that the teacher was open to student ideas (participation in decisions at course level) “to a large/very large extent” and 12% to some extent.		

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

² After first summative examination.

³ 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

In 2024, The students generally felt the course was not well organized, especially restructuring of the schedule, avoiding repetition from previous courses and organization of seminars.

Description of conducted changes since previous course occasion

The following changes were made for the 2025 course.

- Changes to the schedule in terms of number and order of sessions
- Removal of repetitive content from previous courses
- A brief self-assessment quiz was administered to help students reflect on their level of preparation, based on prior related previous courses taken.
- Adjustments in instructions for the role-playing seminars
- Flexibility in group composition and tasks – students decide

Summary of the students' response to the course valuation

- Response rate for the formal evaluation survey was 51.5%
- 11/17 (65 %) to a "large/very large" agreed that they have achieved valuable skills/expertise
- 9/17 (53%) to a "large/very large" agreed to have achieved intended learning outcomes, and similar proportions felt the course promoted scientific way of thinking. 24% felt they achieved ILOs to "some extent"
- 65% felt to "large/very large" the teacher was open to ideas and opinions
- 94% felt to "large/very large" all students were given same learning opportunities
- Generally, most students rated most of the course aspects rather high (*large/very large extent*), including:
 - development of valuable expertise/skills
 - achieving ILOs and course demands reasonable in relation to ILOs
 - Good atmosphere during the course
 - Enough time to reflect on course sessions.
 - common theme running throughout the course
 - promoting scientific way of reasoning (analytical and critical thinking)
 - equal learning opportunities for all students
 - improved ability to communicate orally and in writing, and
- Reflection on ethical issues scored 47% for "*large/very large extent*".
- Students noted that several course components were both beneficial and enjoyable, particularly the engaging seminars, role-playing activities, R sessions, and the peer-review workshop.
- However, some students expressed that the course could benefit from improved organization, curriculum review, in-depth content and a clearer alignment between the course objectives, lectures, seminars and the assessment (formative and summative).
- More clearer instructions/expectations for seminars and less of last-minute changes.
- Some student felt we should discuss more of real-world experiences such as US pulling out of WHO. More real-world data with easy-to-use variables. One student expressed discomfort with AI to provide data.

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

Reflections on the course's strengths, weaknesses, opportunities, limitations within, for example, the following areas:

- *How have the students' previous knowledge, experiences and prerequisites been used as a basis during the course?*

On the first day of the course, the course leader and examiner invited students to present themselves and share their prior knowledge, experiences, and expectations for the course. Prior to the first lecture, an Individual Readiness Assessment Test/quiz (iRAT) was conducted to help students reflect on the knowledge and skills they had retained from previous courses. It was made clear that they can revisit previous course contents and that there will be no repetition of what was already covered.

Although the current approach has been effective, the evaluation indicates a need to more clearly show the students how the course objectives align with the lectures, seminars, role-playing activities, and the final project from the very beginning and to clearly communicate the prerequisite knowledge required for the course. To address this, an improved Individual Readiness Assessment Test will be administered digitally. This will enable students to engage in self-reflection individually, while also providing the course leader with aggregate data to assess overall preparedness. This insight will allow for timely and reasonable adjustments, such as providing targeted pre-course reading materials.

- *In what way the work methods used during the course contribute to the students' attaining the learning outcomes? (Reflect on the selected learning activities and the students' type of engagement and presence in class)*
 - The course combined lectures, role-playing, analytical exercises, paired and group discussions, and collaborative group work and presentations, a format that was consistently appreciated by most students. These varied teaching methods allowed students to actively apply and practice theoretical concepts in different ways. Seminars further facilitated meaningful interaction between students and instructors, fostering an engaging and collaborative learning environment.
 - Given that some complains of unclear instructions still arose.
 - For the next course, additional short individual readings will be added to support the seminars/lectures.
 - Clearer written instructions for all seminars will be availed to students on the first day of the course, posted on the introduction PPT slide in Canvas, brief verbal instruction for the seminars will be provided.
 - For each seminar, same instructions will be posted a week prior in the respective Canvas sub-pages. This will be followed by a brief verbal instruction session held three days before each scheduled seminar, along with a final recap on the day of the seminar, providing an opportunity for related Q&As
 - All students participated in group work sessions and had the opportunity to contribute during in-class group presentations. Flexibility was provided to accommodate students with special needs. However, the obligation for all students in a group to present is still difficult for some students. Considerations are being made to determine how best such students can be helped, e.g., presenting while seated within the small group.
 - The role playing, discussion and oral seminars was continuously appreciated by the students giving them an opportunity to practice hands-on problem-solving skills, communication, dissemination and reporting skills as well as strategic planning. The sessions facilitate critical thinking and student interaction.
 - A few students wished to have more clear communication of instructions for assignments and seminars.

- *How has the course worked with -constructive alignment - from learning outcomes to examination form and examination content?*
 - All content and lectures are continuously reviewed in relation to their alignment with ILOs.
 - Mandatory seminars, role plays, a film screening, group quizzes, and follow-up discussions, aligned with ILOs serve as key components of the course's formative assessment strategy. These interactive activities offer students the opportunity to apply theoretical concepts in a practical context, encouraging the development of critical thinking skills and promoting deeper learning. At the same time, they help assess students' progress toward achieving the course's intended learning outcomes (ILOs). Attendance and active participation were the requirements for Pass.
 - Similarly, the final examination which is a course project that runs throughout the course enabling students to apply various course contents, knowledge and skills concurrently into the development of their individual final projects.

For example, both the formative and final assignments are designed to collectively address and complete the *Public Health Surveillance cycle*, which is a core content of the course in-line with ILOs.

- *How do examinations and assessment criteria ensure that students achieve the learning outcomes of the course? (Reflect on the choice of examination form and formative assessments.)*
 - The final examination consists of a written project, peer-feedback seminar, and an oral presentation, both of which form the core of the course and are closely aligned with its ILOs. Students are expected to conduct a brief literature review and analyse surveillance data, then develop a report presenting the most relevant findings in accordance with the course and surveillance objectives. These findings are also communicated through an oral presentation, focusing on effective dissemination to the appropriate audience. Both instructor(s) and peers provide questions and feedback, and students are encouraged to revise their work before submitting the final report. Additionally, students complete a written peer review of a classmate's project and participate in one-on-one peer discussions prior to the presentations. The final assessment is based on a points system, which is translated into one of three outcomes: 'Pass,' 'Pass with Distinction,' or 'Not Pass.'

Course leader's conclusions and suggestions for improvement

- Students will take a short individual readiness assessment test (iRAT) to reflect on their own experience levels and learning needs, clearly communicate pre-knowledge prerequisite for the course. The iRAT thus will also include contents of Applied Epidemiology 2 course and collecting and organizing Epi data course, to broaden student reflections.
- Explain and clearly show the students how the course objectives align with the lectures, seminars, role-playing activities, and summative assessments during sessions or seminar, or at the introductory session. Whenever possible, also illustrate the relative contribution of each component to the overall learning outcomes.
- Explain to students and show a clear alignment of the course objectives and course content, lecturers, seminars, role playing and summative assessment during each course session/seminar or during the introductory session. And where possible, also show the proportions each distinct part contributes to the overall learning outcomes.

- Communicate what all students should be able to do by the end of the course but allow for multiple pathways to get there based on prior experience.
- Incorporate more real-life case studies and enhance the provision of formative feedback, alongside simulations of varying difficulty levels. This approach will better address the diverse needs of students with different levels of field experience and strengthen the real-world relevance of the course.
- Written instructions for seminars will be availed to students, two weeks prior to each seminar related to the core content, followed by a brief verbal instruction session 3 days prior to each planned seminars and a final brief recap on seminar day, with opportunity for related questions or discussions.
- Ongoing refinement of the course content, structure, and schedule will be conducted, with a presentation planned for August to Jette and Epi-group colleagues for further feedback, aiming to maximize benefits for the students.

Other comments

- Improve clarification and distinction between ethical application for Surveillance and Research.