



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 4FH087	Course title Biostatistics 2	Credits 7,5 hp
Semester VT24	Period 20240219-20240322	

Course leader Nicola Orsini	Examiner Nicola Orsini
Other participating teachers Hugo Sjöqvist Charilaos Chourpiliadis Robert Thiesmeier Shuyun Chen Javier Louro	Other participating teachers

Number of registered students 39	Number who have not completed the course¹ 36	Number passed after regular session² 30
Methods for student influence other than course survey³ Mid-course survey and via interaction with two class representatives		

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

As course director, I am satisfied with the progression of the students during the course considering the several changes we implemented this year. Of course, there is room for improvement in the following areas:

1. On-line feedback on individual exercises (mon-tue-wed) should be replaced with exercises in small groups meeting face-to-face with a teaching assistant available during that time
2. Lecture time should include key learning points and key examples
3. Introduction to the use of the statistical software should be longer
4. The graded quizzes (True/False) should be phrased in a way that is unequivocal and not to be done on Thursday afternoon

Description of conducted changes since previous course occasion

- Reduced the overall number of contact hours per week. In particular lectures of 2 hours rather than 3 hours.
- Replaced individual exercises in large rooms with small group activities in rooms booked at KI by the students.
- key learning points were specified throughout the course
- professional use of a statistical software was evaluated at the end of the course with a home project
- weekly graded and practice quizzes were available on Canvas from Friday to Sunday
- the course material is independent of the statistical software. Students were encouraged to use either Stata or R, whatever they prefer.

Summary of the students' response to the course valuation

A total of 17 out of 39 students (44%) filled in the evaluation form. The typical median score obtained on all questions was ranging from 3 to 4 in a scale from 1 to 5. Had the course not reached the learning outcomes in a positive environment, it would be quite difficult to get such numerical responses.

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

I am overall satisfied of how the students progressed during the course.

Of the 36 students who did the final exam, 30 (83%) passed the course at first attempt. About 47% of the students passed with distinction. Students were encouraged to learn throughout the course using supervised and unsupervised exercises, weekly practice quizzes, weekly DICE and related quizzes, weekly reviews, and final software assignment. Accumulating up to 20 points during the course was appreciated by the students.

The final exam (up to 80 points) was covering the ability to derive and interpret statistical inference based on regression models. The structure of the course can bring forward a large and heterogenous class of students. The course is structured in a way to balance and facilitate the connection between statistical reasoning, the specification of statistical models coupled with a careful plan of a study, and a careful interpretation of its results.

Course leader's conclusions and suggestions for improvement

Participation in the learning activity DICE should be encouraged by recognizing 1 point per week.

Some of the questions in the weekly graded quizzes can be further improved in terms of clarity.

Doing exercises in small groups has been appreciated and should be continued.

A typical lecture should aim to:

- start with key (saying 3) learning points of the day
- include not only statistical theory but also a worked example (no software output) comparable to what they have in the final exam
- end the lecture with a kahoot or similar quizzes to emphasize the learning points

A typical lab should include:

- Part 1 covering statistical concepts and interpretations of statistical inference that requires minimal hand calculations (like the final exam). Part 2 covering the use of a statistical software to conduct the analysis.

Other comments