COURSE REPORT for VT 2025

1. Course:

FMF0063, Introduction to Scientific Research, 10 credits, PhD course

2. Term and year:

VT 2025

3. Course coordinators:

Laia Caja Puigsubira, IMBIM Patric Jern, IMBIM

4. Number of students:

Registered to ISR: 43

Registered to Introduction to Teaching section: 2

5. Response Rate

20/45 = 44%

6. Summary of students' views and suggestions

Suggestion: summarise the most important from course evaluation

- This was good with the course
 - The overall student assessment of the course was an average 3,5 out of 5 (5 being very satisfied). The student opinions on the course leaders were 4,6 out of 5 in the same line as in VT2024 and HT2024. The feedback from teachers was 4,7 out of 6.
 - The students were also positive regarding information from course administration (4,3 out of 5), possibility to remain active during the course (5,5 out of 6), and the group work (4,8 out of 6), as well as teachers feedback (4,9 out of 6).
 - The students also gave specific positive written about:
 - o Course leaders
 - o Open environment
 - Organization
 - Group work
 - o The structure of the course and the mixed lectures and group work.
 - o Feedback from teachers and peers.
 - Some students comments:
 - The course schedule and material was well organized. The feedback sessions after the presentations was really useful.
 - o Teachers are nice and helpful

- The administrators of the course took everything seriously and provided us with all the necessary information. The group work has been fruitful, even if it was I bit too much at times.
- O Systematic review: structured and pedagogical lecture. Relevant task with clear instructions. Ethics group assignment with review of one group members application, relevant task with clear instruction.
- A lot of learning-by-doing. Great to have a study to work with in different perspectives.
- Statistics. Interaction with peers
- The practical group work, especially part 2.
- The group work, workshops and small exercises/discussions during the lecture were really useful to integrate the knowledge but also to know how to apply it. The schedule was also well organized, with heavier content lectures in the morning. Coffee was essential!
- The students also gave specific comments of things that could be improved:
 - One of the students would have like to have the 4 work assignments during Module 1 at once, instead of one at a time. (*This was changed from previous years to accommodate previous comments.*)
 - Even though the statistics section got very good comments, some students would like more practical work.
 - o More preclinical examples.
 - More basic concepts.

Some students comments:

- One of the students was very insistent on that the teachers should respect the breaks as people need air." The air quality in the classrooms are not good. When we have a break, kindly ask everyone to leave the classroom for 15 min or ask Uppsala Uninversity to fix this problem"
- O Since all students are from different backgrounds and have different levels of knowledge in statistics and the fact that this course is an introductory course for research, it should be assumed that no one is familiar with statistics. That can be little boring for those who might have little knowledge on the subject but the aim of the course is to familiarise everyone with the concept and make them have an interest in this. So start from the basics and go really step by step with R, even a description of what we see in the screen when we open the R.
- Shorter the days! Many of the lectures can be turned inot home assignments instead. The assignment: read through this text and write a one page summary of what you have learned. If your argument is that people will not learn by doing this. Does that matter? Since most of the stundents were not listening during the lectures, so they did not learn anything anyway

• Statistics section

- Study design lecture was too short.
- The workshops on Research interpretation and Design of clinical projects were highly appreciated.
- O Some students appreciated the new basic Statistic workshop, mostly focused on R, while others thought it was unnecessary.
- o The students would like another Statistics workshop.

Student comments:

- Super hard topic. But I?ve learned so much. I really think she made it easy in a way but still it was so much and hard to digest. I think this provides me a start to learn more in my own pass and to make use of what?s interesting and relevant for me. Hard but an important part of the course. Really liked her approach as a teacher. Always available and always going back to explain and recap.
- Most useful part of the course! It would be nice to see more pre-clinical examples
- In general the students were happy with the ethics section:
 - The students appreciated the Pre-clinical ethics lecture and discussion, as well as the Biobank lecture.
 - Regarding Animal Ethics, some students appreciated the lecture: "Fredrik explained everything very well. Noticeable that he is an expert on the topic that is also a good teacher. Good that we have this in this course.", while others considered that it was not relevant.
 - The students would like More practical info about how to write an application, step-wise
- This was the fourth time that we incorporated the old course "Introduction to teaching" to the ISR course. Some student comments:
 - The pedagogical module of the course would benefit from using more scientific backing and more focused on practical application.
 - This comment was interesting as the lecturer presentation shows different pedagogical models, and part of the course is preparing a teaching session, this was included for the first time in the CSE course HT24.
 - The introduction to teaching lectures could be improved. The exercises are really useful, but the lectures did have any goal or if they had I don't think it was achieved. It would be nice to have real life situations or different scenarios and get some professional input on how to react or how to prepare, what are the best practices, etc...
 - There is a group discussion section where the students discuss different scenarios that happen in lectures, seminars and lab...
 - Lectures could be better structured and more informative I thought the
 theoretical content was a bit vague. Regarding the assignments, I believe the
 short presentation involving a method to activate students is enough. I don't
 think the personal reflection was necessary.
 - In general the students were happy with the Scientific Presentation section:
 - O I had low expectations on this, don't use social media, but both assignments and lectures were surprisingly funny and interesting. Refers to Social Media and Wikipedia.
 - Other things that some students would like:
 - Not to have to listen to all the presentations (8 abstract, 8 statistic's presentation, 8 popular science, 8 scientific presentation and 8 posters).
 - Would like to have Oral Presentation before the Statistics' presentation.

O Commented that the "fake projects" on Quality of life and Anti-cancer projects were too easy and too little data/material.

7. Teachers responsible suggestions for improvement

Suggestion: shortly summarise planned improvements (short- and long-term) and motivate if improvements will not be made on a certain aspect.

We had already included an extra workshop for Statistics in VT2025, to better introduce R, and have more time for practical exercises. We have now planned a new Workshop at the end of the course.

We will remind the teachers to include more pre-clinical data, respect the breaks, and when possible open windows (not always feasible in many of the BMC rooms)

We continuously discuss improvements with the Introduction to Teacher lecturer, interestingly the students reflections do show that the students have learned during this part of the course.

One of the comments we got this year was about too many presentations during the last week of the course, when the students present all the assignments from each group (8 abstract, 8 statistic's presentation, 8 popular science, 8 scientific presentation and 8 posters). This comment was already given before, we cannot remove all the presentations, but we will test next autumn that the students only listen to half of the abstracts and half of the popular science presentations.

8. Signature of course responsible teacher

Laia Caja Puigsubira, IMBIM, Course leader Patric Jern, IMBIM, Course leader