Course analysis (course evaluation)

Course code	Course title	Credits
1BI037	Cell, Stem Cell and Developmental Biology	12 HP
Semester (VT/HT-yr) HT2023	**Dates** Nov 14th 2023 to Jan 12th 2024	

Course Director	Examiner
Matthew Kirkham (MK)	Lena Ström
Teachers in charge of different parts of the course **Main lab teachers:** -Labs: Matthew Kirkham **Main CCT teachers:** Part 1: KIB staff Part 2: Anna Kouznetsova and MK Part 3: Anna M Borgström (Writing support)	**Other participating teachers**

Number of registered students at the 3-week check: 58	Number passed at final course day: 46	Response frequency course valuation survey: 57%
Other methods for student influence (in addition to the final course valuation/survey) - Course council meet with course representatives- Held after the course is completed - Through continues discussions between course representatives and the course director during the course - Through Informal discussions between students and course director during the course		
Feedback reporting of the course evaluation results to the students Course analysis is uploaded on to course website. Emailed to the course representatives		

Note that...

The analysis should (together with a summarising quantitative summary of the students' course evaluation) be communicated to the education committee at the department responsible for the course and for programme courses also to the programme coordinating committee.

The analysis was communicated to the education committee on the following date: June 1st 2024
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1. Description of any changes implemented since the previous course occasion based on the views of former students

- Updated the course literature with the new edition of molecular biology of the cell (edition 7). In conjunction with the publisher, I arrange a discount for student to purchase the book or eBook. In addition, links from the course canvas pages were published to the relevant chapters in the eBook and curated MCQs. The study guide was also updated.
- This year for the first time the lab report was individual rather than group based and in line with this rubric for the assessment of the written lab report was modified.
- Last year the students struggled to write the results section. To help them more information and discussion sessions on scientific writing were added.
    - Additional information session on the last day of lab 2 where students receive specific instructs followed by a Q&A. On writing results.
    - Moved the deadline for the submission of the lab report to earlier in the course. This is followed by a discussion of lab report and scientific writing. The students were then allowed to resubmit their lab report before grading.

- Changed protocol to lab 2 to improve the results the students can achieve. There was a problem last year with the cells detaching during staining.
- Increase focus on CCT 2 and 3 to encourage student participation in the group work.

2. Brief summary of the students' evaluation of the course

(Based on the students' quantitative responses to the course valuation and key views from free text responses. Quantitative summary and any graphs are attached.)
-Additional feedback from discussion with the student representatives and students

Summary of students' student online survey

In general, 85% of the students thought the course was very good or good. The survey also demonstrated that the students felt that they had developed valuable expertise /skills during the course (mean score of 4.1 out of 5) and scientific way of thinking and reasoning (mean score of 4.4 out of 5). Furthermore, most of the students felt to a large extent or very large extent that the course structure was good (mean score 3.8 out of 5), the workload was reasonable (mean score 4.2 out of 5) and examination was relevant (mean score 4.2 out of 5).

Most relevant responses for student online survey on improvements

Strengths:
- The Communication and Critical Thinking modules were useful and interactive. The lab practicals were exciting and the lab simulations were useful. The exam was very closely based on the content of the course and the textbook.
-The labs taught me how to work independently and how to organize myself efficiently in order not to waste time. The labs, the lab exams of pipetting and microscopy, presentation and the flash talks gave me more confidence in myself and allowed me to practice very valuable skills. The atitude of the lab assistants and Matthew Kirkham were truly that of real teacher in the sense that they always helped when I had questions and this made me gain knowledge in a positive way about doing things I had never done before and didn't understand first like for example how to perform a dilution correctly.

Improvements:
-I would have appreciated if the canvas of the course was more organized in the sense that all lectures would have been organized in a large table with the name and correct date with a link to the file directly in the column next to the title of the lecture.
- I wish there was more guidance on the material that should be covered for the course (such as a study guide) and that the lectures were closer to the textbook so that in case of any misunderstanding I knew what to refer to. I also feel like it would be extremely helpful if there wereanswers provided to the self-study questions.

Most relevant feedback from Student reps

- Most of the lectures were very good, but there were some less experienced lectures that might need more support. All the discussions were v good and students would like more small group discussions on some topics.
- Self-study questions: some students found them useful, but others would like printed answers to the questions or more support regarding the answers.

- Students felt that there was some overlap between some of the different Stem cells lectures.
-Some of the students felt that parts of the lab compendiums were hard to follow. (especially lab1)
- Students thought there could be something about scientific writing in CCT part of the course, but in general the CCT part was greatly enjoyed.
- CCT 1 mandatory session could be short.
-The canvas pages should be reorganized.

3. The Course Director's reflections on the implementation and results of the course

Strengths of the course (what worked well)

The course was a success. Students thought that the for a very large extent that the lectures and Labs were good and all the teachers they encountered were excellent. This is reflected in the course survey with a high approval rating for the course. The attendance of the lectures was generally good and there was a very high pass rate of the exam.
CCT part was very appreciated with the diverse assessments. There was much better participation in the group activates this year.

Weaknesses of the course (what could be improved)

This year there were a few new lectures that may need a little more support for next year. Though the canvas structure has not changed excessively from 2022 students struggled to find the information. This was maybe due to the large number of links to the eBook. Also, when there was a lot of information on any one page some students found if confusing or difficult to find want they needed. The increase in information per page may have been coursed by updating of the study guides.

In general, the lab report worked well but there is still room for improvement. Many students did not understand what was require regarding creating the figures to pass. Also, students mix up text from the results, figure legends and discussions.

3. Other views

4. Course Director's conclusions and any suggestions for changes

(If changes are suggested, state who is responsible for implementing them and provide a schedule.)

-Update canvas page to have a very similar structure to general organic chemistry and review the eBook links. (Matthew September 2024)
-Review the text on the lab compendiums (Katarina Gradin Feb - May 2024)
-Evaluate how CCT part 1 works. May be shorten the mandatory in person part and add an online quiz. (Sept –Oct 2024 Matthew & KIB staff)
-Review the discussions in the course currently and see if it is possible to have additional small groups discussion. (Matthew September 2024)
-Investigate if generative AI can help give support with the self-study questions.
-Review the content of the stem cell lectures.

Appendices: