

Evaluation KJM1140 - 2022

The course was given in the same format as in previous years, since the previous evaluations had not suggested large changes. In addition to two weekly double lectures and weekly colloquia, it comprised 6 labs, of which three were wet labs and three were computer labs (molecular graphics or programming). Once during the course, the students presented posters to each other in small groups. In addition, all students gave mini-lectures (10-15 minutes) at the beginning of the lectures, for which they received constructive feedback afterwards. In the midterm week, the students received a home trial exam, which was later discussed in class. The final exam was oral. New this year was that we had a voluntary midterm exam about amino acids, which could give the students bonus points for the final exam. We also slightly changed the format of the programming lab, with a new lab responsible. However, the biggest change was that the course was given in the 4th instead of the 1st semester, which meant that the students had much better prior knowledge. However, unfortunately, in this semester, very lab-intensive courses overlapped with KJM1140, which let many students down-prioritize our course. – We evaluated the course continuously during the course, meeting the student representatives on three occasions, and with a mentimeter-based evaluation and a web-based questionnaire (for the latter, we should next time switch to a true anonymous format).

Both the midterm exam and the lab update were well received. It was suggested that in the next year, the final two labs could have an advanced option for especially motivated students. For the “egg-to-crystal” lab, the students preferred to either write a regular lab report or answer a lab-related questionnaire, instead of using a pre-written protocol. Some students asked for more active feedback during the lab, with questioning. In the enzyme kinetics lab, it was noted that we had too few spectrophotometers, however, five additional spectrophotometers could have been used from Skolelab. Next year, this needs to be better communicated.

The lectures (with few exceptions) received positive evaluation. There was a good learning environment, and it was experienced as positive to have several teachers present during the lectures, which enhanced learning. Especially the discussion tasks and other interactive components were appreciated, whereas the lack of podcasts from this year (due to texting requirements) was regretted. The students appreciated the possibility to follow the lectures per Zoom in hybrid format. Some students liked that there were several different lecturers. Last year, we introduced the concept of 3 questions representing the learning outcomes of each individual lecture. For next year, it was suggested to add a question related to the biological context; and possibly to reduce the number of compulsory lectures. To more evenly cover different topics, it should also be considered to add a double lecture on carbohydrates & glycoconjugates, and instead remove the consolidating lecture on lipids & protein synthesis.

The colloquia were very positively evaluated. Possibly more of these could be compulsory instead of some of the lectures. As a point of further improvement, it was mentioned that the exercises could more directly promote interactions between students, *e.g.*, by using words like “diskuter” or assigning students responsible for different exercises to lead the discussion and sum up at the end. Another suggestion was to group questions into “for discussion in class”

and “for preparation at home” tasks, and to adjust the workload between exercises. We might also consider if the exercises are correctly spaced compared to the lectures, or if they should follow with a week delay.

Next year, we expect to have many more students. This means that it will not be possible that all students give mini-lectures and present posters. However, since these activities generally received positive feedback, it would be possible to allow a certain number of students to volunteer for these tasks, and let the remaining students “peer-review” lab reports, as currently done in BIOS1130. With that many students, also the exam format will have to be changed back to written exams.

Summarizing, we received very positive comments about the course, and its organization. Our main concern is the placement of this course, together—and overlapping—with other courses that have a very high workload.

88% of the students passed the final exam, with 31% obtaining the highest grades (A or B; 25% A), and 25% receiving good grades (C or D).