

## Evaluation summary for KEMM13 Advanced Biochemistry 15 hp VT2016 2016-06-22

**Course leader:** Urban Johanson

**Other teachers:** Hans-Erik Åkerlund, Susanna Törnroth-Horsefield, Stefan Kreida, Veronika Nesverova.

**Students:** 14 + 1 (only theoretical part)

**Outcome after 2<sup>nd</sup> exam:** 10 (67%) passed the exam with honors, 4 (27%) passed, 1 (7%) did not pass. All except one passed the other mandatory parts.

### Evaluation:

#### I. Summary of course evaluations

*Mid-course evaluation:* Overall the course is working fine and no issue that called for immediate action was identified. Suggestions for improvement of the course are summarized in the PM "Notes from mid-course evaluation meeting KEMM13 2016-05-03". Some of these are put forward under point IV below.

*Survey&Report:* 12 answers of 15 respondents (80%). The categories were rated from 1 (very bad) up to 5 (very good) and opportunity to add free text was provided on each question. The general impression of the course is very good (4.5), which is consistent with the rating last year (4.6). In accordance all students were very pleased with the assistants & teachers (5.0, last year 4.8) and also the lab projects were highly appreciated (4.8, last year 4.9). The lecture part got the lowest rating (4.1, same as last year), whereas the problem solving and project planning had improved this year (4.2, last year 3.9). The estimation of their workload was slightly lower than previous year (2.7, last year 3.0: 31-40h/w). The free text answers specified that the students particularly liked the project (lab 2) and the helpful assistants, whereas stress due to short time between lab 2 and the exam was most disliked. An alternative to written exam, time limits for plan presentations, fewer articles, written answers for one question, more time, more lectures, an extra exercise connected to first three lectures, and an explanation of PCR was suggested to further improve the course

#### II. Comments by course leader

The course is running well and this year there was no clash with other courses in the lab. The total outcome taking both passed and passed with honors into account is similar to previous years (73% after first exam) however the relative number of students with the higher grade is exceptionally high. The presentations of project plans were taking longer than scheduled, and some lectures and problem discussions were also rescheduled. Some confusion on lab 2 regarding planning, presentations, expectations on provided material and primer design, and on problem discussions regarding where to send the answers.

#### III. Evaluation of implemented changes of the course

A simple quiz was used to evaluate previous experience and to guide the formation of lab groups. On the whole this worked fine, however one group was allowed to split after the first lab to avoid disagreements. Students were allowed to work with problem 2 in groups addressing specific questions before a common final summary was made. This worked fine and appears to be appreciated. SK provided an extra

exercise on solubilization and protein purification *in silico*. This was not specifically addressed in the evaluation but appeared to work fine. Provided a date for re-examination in schedule, no notable increase in students postponing the exam, all except three attended the first examination. Exams were anonymous when corrected, and coded results were published at Live@Lund. Some more time was required, but worked fine.

#### **IV. Suggested changes**

- Provide detailed schedule for presentations of project plan vers. 1 & 2.
- Make it more clear what is expected at the presentations to avoid too much details – too long time.
- Renumber problems to avoid unnecessary confusion.
- Make assignments for Problem 1-3 so it is clear where to hand in answers.
- Make it clearer that designed primers should be brought by the students to the “Reviewing and ordering of primers” event.
- Provide examples of answers to one or two exam questions to clarify what level of details is expected.
- Consider providing links to videos illustrating important concepts.
- Consider using a “Flipped class room” approach for primer design, i.e. provide instruction as recorded lecture at Live@Lund.