

MOL222 Eksperimentell molekylærbiologi II

Emneevaluering vår 2019

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Course content

The course consists of:

- Lecture-style teaching: 1 introduction lecture (2 h), 3 lectures prior to each lab exercise and 4 question time (spørretime), each 2 x 45 min.
- Laboratory teaching: (9 days, each of about 6 h) x 2 groups, focusing on standard molecular biology methods (cloning, sequencing, cell transfection and immunostaining, western immunoblotting).
- All activities are mandatory except the question times.

This course was re-developed by AEL with the help of DCT and implemented in 2018. The assessment form was changed to the format folder evaluation "mappevurdering" last year instead of a written exam. Students write sub-reports after each lab exercise and receive detailed written feedback (from AEL and DCT), but these are not graded like previous years. The folder consists of a final lab report submitted to inspera at the end of the lab course, which summarizes everything that has been done on the course in the style of a journal article.

The lab exercise protocols are distributed at the introduction lecture. Other information is uploaded on Mitt UiB. Chapter 4 ("*Step-by-step instructions for preparing a laboratory report or scientific paper*") of the book entitled "A student handbook for writing in biology, 5th edition from Karin Knisely was available on mitt uib digital library.

Examination grades 2019

33 and 29 students took part in 2019 and 2018 respectively and were awarded the following grades:

grade	A	B	C	D	E	F	Gjennomsnittskarakter
2019	4 (12%)	11 (33%)	14 (42%)	3 (9%)	1 (3%)	0	B/C
2018	2 (7%)	11 (38%)	14 (48%)	2 (7%)	0	0	C

Comments on the student survey's results

The survey was sent out to 33 students, and 23 (69%) responded. 74% of these were students in the second year of the Bachelor's program in molecular biology and 9% were students in the third year. 9% in the master's program and the rest was from "other" programs. On average, the students who responded to the survey thought the course should be 11.8 credits, which is a further reduction compared to last year (12.1 in 2018 and 13.3 points in 2016).

In 2016, 63% felt that the workload for the subject was too large, while this year and last year, 70 and 71% respectively of respondents thought it was appropriate. This underlines that the reorganization of the course has been successful regarding the workload of the students in the semester they are taking the course.

A few comments that the final lab report took a lot of time, but that it as expected. It should take quite some time, scientific writing is challenging and requires focus!

This year was unexpectedly challenging as AEL was on sick leave for 3 weeks right in the middle of the course. This meant that some follow up was more challenging that it should have been. Nevertheless, all, except one lecture was carried through.

General comments and plans for improvement

This course is challenging but at the same time rewarding for the students and the lecturers. The aim of this course is not only to learn molecular techniques, but to understand and digest the results that they give as well as to synthesise them scientifically. It is demanding for all but a necessary learning exercise in molecular biology. The learning curve can appear to be steep for some of the students.

We will start MOL222 by an in class workshop to increase the focus on the theory back the exercises carried out in the lab instead of starting directly with lab exercises. We expect that this will allow the students to get a better understanding of the practical aspects and the overall thread through the exercises. In addition, this will give a bit more breathing room between MOL221 and MOL222. Indeed, some students still need to work on their last lab report from MOL221 when MOL222 actually starts.