Course Evaluation 2019

MOL320 Biophysical Methods for Molecular Biologists (10 ECTS)

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MOL320 is a practical course that aims to provide students with both hands-on experience and theoretical knowledge on various biophysical methods on molecular biology systems. It is an elective course for MSc students who major molecular biology. The methods covered in MOL320 are: Fluorescence, Isothermal titration calorimetry, Surface plasmon resonance, and (high resolution) NMR. Topic-specific lectures precede practical sessions.

A letter-based formal grade is given in MOL320, which is consisted of a formal written exam (70%) and an overall report evaluation (30%). Three students enrolled in 2019 and all completed with very good grades both in report evaluation and in written exam.

1. Textbooks and required literatures

For syllabus, MOL320 has lab protocols and required reading materials (all provided). There is no textbook, but two supporting books are listed. These are 'Foundations of Molecular Structure Determination' (by Simon Duckett, Bruce Gilbert, Martin Cockett, 2nd ed., 2015 Oxford University Press, ISBN 978-0-19-968944-6) and 'Introduction to Protein Science' (by Arthur Lesk, 3rd ed., 2016 Oxford University Press, ISBN 978-0-19-871684-6). Introduction to Protein Science' is the textbook of MOL310 (Structural molecular biology).

2. Report submission and evaluation

Students submit 4 partial reports (after each module) and one final full report built from these 4 partial reports. Each report is reviewed and graded.

3. Exam questions

In terms of the format and contents, the questions were by and large similar to the previous exams. (2019 was the first year as of my being course-in-charge). One notable exception was the question that asked 'Make a plan to publish the scientific findings. What/How to carry out the required experiments and how to arrange/analyse the results.' Here the technical details were not on focus, rather the justification of experimental plans and presentation plan were sought. All reasonable answers were credited, and all students did very well in the written exam.