

Teaching Portfolio

Clare Kirkpatrick
Associate Professor
Department of Biochemistry and Molecular Biology
Email: clarek@bmb.sdu.dk
Phone: 65509094
Mobile: 93507355

Educational training

2018 SDU Lecturer Training Program
2014 Instructional Skills Workshop, University of Geneva

Administrative tasks relating to education

Course responsible for BMB507 (Fundamental Microbiology, 5 ECTS, 4th semester in BMB and Biomedicine degree courses) since 2018.
Member of BMB PhD Study Committee since 2020.

Experience with teaching, supervision and examination

Teaching

2018-present BMB507, 12 hr of lectures, lab course of 10 hr/student, examined by written exam
2019-present FF501, first year project, 7 hr of project group supervision, examined by report and oral exam
2017-2019 BMB803, 2 hr of lectures, 4 hr of seminars, examined by oral exam
2011-2015 Teaching assistant for practical course in microbiology, 5 hr/week during fall semesters (for medical students, University of Geneva, Switzerland)

Supervision of student projects

2020 Aug-present 2 MSc thesis, 2 Bachelor thesis, 2 pre-MSc ISA (10 and 15 ECTS)
2019 Aug-2020 June 2 MSc thesis, 3 Bachelor thesis, 2 pre-MSc ISA (10 ECTS), 2 pre-Bachelor ISA (10 ECTS)
2018 Aug-2019 June 1 MSc thesis, 3 Bachelor thesis, 2 pre-MSc ISA (15 ECTS), 2 pre-Bachelor ISA (10 and 5 ECTS)
2017 Aug-2018 June 1 MSc thesis, 3 Bachelor thesis, 1 Erasmus student ISA (15 ECTS)
2017 June-present 3 PhD thesis (1 graduated March 2020, 2 ongoing)

Examination

National and international PhD evaluation committees (three times in 2020: University of Aarhus, University of Copenhagen and University of Toulouse)
Evaluation of written examinations for my own course (BMB507)
Censor for BMB821 (MSc thesis preparation course, 5 ECTS, examined by written report)
Censor for 5 ECTS ISAs and first year projects of colleagues (examined by oral exam)

Methods, materials and tools

Analogue teaching activity development: E-timer answer lottery for BMB507 tutorials

Description:

Gameified system of numbered tokens that the students in an E-timer class pick out of a bag, to sort them into random groups to go over selected questions from the homework question set (matching the number on the token) before presenting their group's collective answer to the rest of the class. This approach was successful in increasing class participation while at the same time not exposing individual students who were less confident with the class material. This activity had to be discontinued due to COVID in 2020, but in 2021 I trained my TAs to use Zoom breakout rooms to set up similar random-sorted groups, which was also a success.

Digital teaching activity development: interactive lecturing with online exercises using the web application Padlet

Description:

Used Padlet to make online exercises for use during lecture hours, with a question relating to the lecture material that they entered free-text answers to. These were used half way through lectures to divide up the time and keep the students active, while letting them actively use the material they had just heard to come up with the answer. These were used in 2018, 2019 and 2020, originally as part of my teaching development project for the SDU pædagogikum in 2018. I adapted the question style and timing slightly for the second time of use in 2019 based on responses in my 2018 student evaluation, and in my 2019 evaluation a few of the students were specifically mentioning the Padlet exercises in lectures as one of the highlights of the course. I did not use this tool during 2021 lectures which were all online, but will re-introduce it when lectures are held live and in-person again.

New course development

I am currently developing a new elective MSc course in molecular microbiology, launch date planned for spring semester 2022. The course's working title is "Molecular Biology and Genetics of Bacteria" and will cover modern advanced molecular microbiology focusing on the fundamental mechanisms governing bacterial cell cycle regulation, bacterial developmental processes, stress responses and interactions with bacteriophage.

The goal of this course is to give the students understanding of the latest developments in molecular microbiology including the latest methods, and give the competences to critically analyse the scientific literature in this field and apply such methods to their own work in their MSc thesis projects. The planned teaching methods are to introduce the course material with a small number of lectures, to bridge the gap between undergraduate microbiology courses and the content of the review articles they will be given as part of the curriculum, and to have the majority of the teaching hours consist of peer to peer presentations and evaluations of selected journal articles. The course will also include some lab hours.

Educational development and research as well as educational awards

None applicable