

## Teaching Portfolio

Beate Kraft  
Department of Biology  
Nordcee  
Email: bkraft@biology.sdu.dk



## Teaching responsibilities

### Courses of which I am in charge

BB539 Experimental methods (1st year BSc), lectures and laboratory course, 5 ECTS

### Contributions to courses

*At the University of Southern Denmark*

B509 Microbiology (BSc), lectures, seminars, laboratory course, 5 ECTS

BB540 Microbial ecology and global biogeochemical cycles (BSc), lectures, seminars & laboratory course, 10 ECTS

BB523 Pharmaceutical toxicology A (BSc), laboratory course, 5 ECTS

### Previous courses

Deep Sea Biology (Elective for Bachelor and Master students), guest lecturer

Marine Chemistry (Master), tutorials and laboratory courses

Prokaryotic Microbiology (Master), tutorials and laboratory courses

Eukaryotic Microbiology (Master), tutorials

Inorganic chemistry (BSc), laboratory course

### Project supervision

I supervised 3 visiting PhD students' projects, 3 master students and several bachelor students and lab rotations

### Assessment

Experience with assessment through written and oral exams and with assessment through reports and group projects.

## Methods, materials and tools

My teaching experience includes classical lectures, seminars, laboratory courses and field excursions. I make use of E-learning tools including E-tests and videos.

I feel it is essential that we train students to develop a connection between theory and practice. Therefore, when teaching a class or mentoring students in the lab I strive to help students understand the foundational principles, develop creative and critical thinking skills, and communicate their knowledge.

The courses I teach take place early in the undergraduate education and I typically teach many students with different backgrounds and different styles of learning. It is important to me that my approach to research-based teaching is well aligned with the course structure and students' background. My courses combine lectures with laboratory exercises, which provides a great platform to employ a research-oriented approach. Especially in courses early on in undergraduate education, I aim for my students to gradually build their competences and skills to design and carry out a research experiment, be critical towards the method and results and begin to actively question concepts and frameworks. I expect that the students start to make use of and reflect upon the competences they acquire throughout the course. In practice, this means that the research questions that the students work on will get less teacher-governed and more complex throughout the course. A strong link between my laboratory exercises and the content of my lectures is crucial to me. In my lectures I introduce concepts corresponding to the research questions that the students focus on during the laboratory exercises by using examples from my own or other relevant research, whenever fitting. That way, I make sure that all the three didactic categories (content-students-teacher) of the didactic triangle (Keiding 2010) are well connected, that my course combines research-oriented and research-based with research-led components according to Mick Healey's model (Healey, 2005), and my students alternate between being the audience as well as participants.

*Keiding, T (2010) Forskningsbaseret undervisning - undervisningsbaseret forskning.*

*Healey, M. (2005). Linking research and teaching to benefit student learning. Journal of Geography in Higher Education, 29(2), 183-201.*