

Title of module

Modular Advanced Practical and Seminar
in the Focal Point Programme
"Molecular Medicine" VZ: 185780, 183781
"PCR und Primer-Design"

Credit points

4

Available in semester(s)

1

Hours per week

5.25

Compact course



Lecturer(s)

S. Hahn and teaching assistants

Teaching methods

Two weeks advanced laboratory course with an integrated seminar, one of four lab courses to be completed in the first term

Evaluation of learning progress

Active participation in the laboratory tasks and seminar, feedback during the experiment

Mode of examination

Assessment of active and successful participation in the practical (50%) and a written project report (50%)

Learning objectives

After completion of the course students will have acquired basic practical skills in standard molecular biology techniques, such as generation of a recombinant plasmid vector, DNA-Isolation and quality control, PCR, RNA Isolation and Quality control

Soft skills

Collaboration in a small team of 2-3 students and interaction with the members of a research laboratory as well as oral presentation of results.

Contents of module

- Principles of PCR technology
- Primer design for PCR
- Vector cloning
- Plasmid preparation
- DNA-Sequencing