

Title of Course:

Modular advanced practical in the focal point programme "Molecular Medicine",

VZ: 209 806 / 209 852

"Proteomics in clinical research"

Type: Compulsory Course			Workload 120h	Intended for Semester I	Duration 2 weeks
I	Module: Elective Practical		Hours per Week 5.25	Self-study 46,5 h	Credit Points 4
2	Teaching Methods: a) A two-week all-day practical lab course in a research group; b) Integrated . The module focuses on methods in protein analytics: sample preparation, protein isolation and tryptic digestion, peptide separation by liquid chromatography, protein identification and quantification by means of mass spectrometry, statistics and bioinformatics seminar				
3	Group Size: 1-3				
4	Learning/Course Objectives: Students will work on small projects in a research lab. Students will learn how to plan experiments and how to document and evaluate them. They will also learn how to write scientific protocols. In addition, they will learn to present collected results in a lecture to others.				
5	Contents: The module focuses on methods in protein analytics: sample preparation, protein isolation and tryptic digestion, peptide separation by liquid chromatography, protein identification and quantification by means of mass spectrometry, statistics and bioinformatics				
6	Degree Courses: Master of Science Biochemistry				
7	Prerequisite(s): Knowledge of basic methods in molecular biology and protein chemistry.				
8	Method(s) of Examination: Assessment of active and successful participation in the practical (50%) and a written project report (50%)				
9	Requirements for Acquiring Credit Points: Achievement of at least the mark "sufficient" regarding the above modes of examination.				
10	Significance for Overall Grade: Weighted according to CPs				
11	Frequency: Every winter term				
12	Lecturer(s): Prof. Sitek, Dr. Bracht, Dr. Bayer				
13	Additional Information: This lab course is one of four courses in total to be completed in the first term, which have to be fulfilled in different Focal Point Programs				