

Title of Course: Advanced Practical in the Focal Point Programme "Molecular Medicine" "Transgenic cell lines in cancer research"				
Type: Mandatory practical with choices		185881	Workload 240 h	Intended for Semester 2
				Duration 0.5 Semester
1	Module: Advanced Practical with seminar	Presence hours per course a) 112 h b) 14 h	Self-study 114 h	Credit Points 8 CP
2	Teaching Methods: a) Practical b) Seminar A five-week all-day practical lab course with a compulsory seminar presentation. Please note: A second Advanced Practical will have to be performed in the same semester to earn the full complement credits			
3	Group Size: Individual training			
4	Learning/Course Objectives: Students practice experimentation on a small, closely supervised project in a research lab. They also practice how to properly evaluate and document experimental data. Finally they practice how to write a concise, informative, sufficiently detailed and precise protocol. Finally, they show their data in the lab seminar of their supervisor, typically in an oral presentation, thereby practicing how to present experimental data to an audience.			
5	Contents: Basic practical skills in standard technologies to establish transgenic cell lines via lentiviral gene transfer for functional analyses of selected cancer related genes (including shRNA, CRISPR/Cas9 or standard expression vector technologies). Seminar: Organizing research content and data documentation, critical result evaluation and project result discussions with the supervisor			
6	Degree Courses: Master of Science Biochemistry;			
7	Prerequisite(s): The four Modular Advanced Practicals of the first Master semester have to be passed			
8	Method(s) of Examination: Assessment of experimental skills during the practical (50%), a written project report (40%), and a seminar presentation of experimental results (10%).			
9	Requirements for Acquiring Credit Points: Active participation in the practical, providing a written report and regular oral presentation of results during the weekly lab seminars.			
10	Significance for Overall Grade: Weighted according to the 16 CPs for two practical courses the average grade of the two practicals provides 13.3% of the overall grade			
11	Frequency: Every summer semester			
12	Supervisor(s): S. Hahn, A. Maghnouj			
13	Additional Information:			