Title of the module	**Molecular mechanisms governing developmental decisions in flowering plants**		
Term/semester	Summer term / 2		
VAK-Number	Will be assigned centrally		
Credit points	6 ECTS		
Compulsory/elective course	Elective course		
Teaching methods	Method	SWS	CP
	Lecture Seminar Lab course	1 (14h) 2 (28h) 4 (56h)	1.5 1.1 2
Self studies	Preparation of Protocol 30 hours Preparation of Seminar 30 hours Preparation of Poster 20 hours		
Module representative	Prof. Rita Groß-Hardt		
Instructor	Prof. Rita Groß-Hardt		
Examiner	Prof. Rita Groß-Hardt		
Objectives	- Gaining a mechanistic understanding into the molecular basis of plant development with a focus on flowering time control - Acquiring knowledge on various techniques, which allow assessing posttranscriptional processing.		
Content of teaching	- The practical course will address the role of posttranscriptional modification for the fundamental process of flowering. On the basis of recently published results, plant transcriptomes will be manipulated in a qualitative and quantitative manner and selected pre-mRNA transcripts will be characterized making use of RT-PCR. In order to monitor posttranscriptional processing, a dual-luciferase assay will be employed. Finally, plants overexpressing central flowering regulators will be investigated to gain insights into the mechanistic basis of flowering. - The lecture and seminar will increase the theoretical knowledge of the molecular mechanisms underlying fundamental developmental decisions in plants		
Learning results	- Gaining a mechanistic understanding into the molecular basis of plant development with a focus on flowering time control - Acquiring knowledge on various techniques, which allow assessing posttranscriptional processing.		
Control of the learning progress	Seminar talk, poster, and protocol		
Grading	Protocol (30%); Seminar talk (40%); Poster (30%);		
Frequency	Each summer semester		
Use in other tudy courses	Suitable for all master students in the BMB-program.		
Requirements	Successful participation in the modules A and B		

January 2015