



COURSE CATALOGUE

SLU SEMESTER 1

emPLANT+ COURSE CATALOGUE
ERASMUS MUNDUS MASTER PROGRAMME IN PLANT BREEDING

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Joint Courses

JOINT COURSES	Description, contents, learning outcomes	Implementation:
Pilot case	<p>The pilot case is a case study to apply the project management tools to a breeding program. First students by group o choose a species to be ameliorated. Then, find a character or several as goal for the breeding strategy. After, they check that there is a potential market for this new variety and verify that farmers will want to cultivate it and consumers too (1 week work) To be accomplished during all the first year. Secondly students are going to define the potential market for their product (seeds), but also the market for the new variety (consumers). Thirdly they need to create a structure who is going to breed the new variety, and define the role of each student on the group in this structure (company, association...)</p>	<p>The introduction to the Pilot Case will take place during the Joint Integration Week where the groups will be formed based on the specialty chosen by the students for Y2. During the first year the students will work in groups with their tutors and via telephone/video conference/email. During S3 the Pilot Case will be finalized with the tutors at the host university and by telephone/video conference/email among the group members. Two juries will be organized. The first jury at the end of S1 will evaluate the content and the form of the work and especially the project management content. At the end of S2 a written report and a second presentation more focused on the breeding schema will be evaluated. At the end of S3 a jury composed of the local tutors, the Coordinators for Y1 and an expert in Project Management will judge the defense of the Pilot Case. The juries of S1 and S3 will be carried out the same day for logistic reasons.</p>

Semester 1 SLU

SEMESTER 1 SLU (30 credits)	Objectives	ECTS
Introduction to Plant Biology for Sustainable Production	<p>The course will give an introduction to the master program in Plant Biology for a Sustainable Production. The course will provide the students with a basic foundation for future University studies at the master level and a comprehension of the basic biological conditions for plant production.</p> <p>The course lectures, exercises and excursions cover:</p> <ul style="list-style-type: none"> - basic plant biology, including plant physiology, metabolomic, genetics, and molecular genetics - conditions for plant production, covering agriculture, horticulture, and forestry. - basic statistics with relevance for the courses that follow in the master-program - an introduction to ethical argumentation, sustainable development, science philosophy and the scientific method and science communication. - scientific presentations, in oral and in writing. 	15
Plant Growth and Development	<p>The course deals with developmental biology of plants and environmental constrains upon plant growth. Focus is on regulation of cell division, meristem activity, plant stem cells, embryogenesis and organogenesis, signal transduction and plant hormones. Molecular techniques such as recombinant DNA techniques, protein targeting, gene and protein expression analysis, and mutant screening are used.</p>	15
Swedish as a foreign language	<p>The topics range from introducing and telling about oneself to greetings, family, food, shopping, weather and telling the time. The topics also include daily activities, living, transport and the immediate surroundings.</p> <p>The aim is to introduce students not only to the basic structures of Swedish, but also to the Swedish way life. Simple everyday conversation is practised.</p>	Certificate
Spanish as a foreign language	<p>This language course is targeted at students who chose UPV as Y2 destination and who still need to bring their Spanish to a B2 level for everyday life and professional situations. Students will learn Spanish at the rate of 2 hours per week. In addition to classroom instruction, students will realize interactive assignments. This course is carried out in close collaboration with UPV so as to ensure that the students obtain the language level needed.</p>	Certificate