



# 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	Prerequisites	Implementation:	ECTS
Pilot case	<p>Semester 1 and 2: UniLaSalle, SLU Semester 3: UH, UPV, EgeU</p> <p>The pilot case is a case study to apply the project management tools to a breeding program. First students by group have to choose a species to be ameliorated. Then, find a character or several ones as goal for the breeding strategy. The students need to check the market potential for this new variety and verify that farmers will want to cultivate it. Secondly, students will define the potential market for their product (seeds), but also the market for the new variety (consumers). Thirdly, they need to create a structure to breed the new variety, and define the role of each student of the group in this structure (company, association...).</p>	No prerequisites	<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 if group members are not located at the same site (LAS/SLU). 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 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 students of S1 and S3 will be able to attend their respective presentations. The juries of S1 and S3 will be carried out on the same day for logistic reasons.</p>	Included in the ECTS below

## Semester 1 SLU

SEMESTER 1 SLU	Description, contents, learning outcomes	Prerequisites	ECTS
Introduction to Plant Biology for Sustainable Production	<p>The course gives an introduction to the master's program in plant biology for sustainable production and provides the students with a basic foundation for future university studies at master's level and an understanding of the basic biological conditions for plant production.</p> <p>The course lectures, exercises and excursions cover:</p> <ul style="list-style-type: none"> <li>- basic plant biology, including plant physiology, metabolomics, genetics and molecular genetics</li> <li>- conditions for plant production, covering agriculture, horticulture, and forestry</li> <li>- basic statistics with relevance for the courses that follow in the master's program</li> <li>- an introduction to ethical argumentation, sustainable development, science philosophy and the scientific method and science communication</li> <li>- scientific presentations, in oral and in writing</li> </ul>	120 credits including alternative A)/60 credits biology and 30 credits chemistry or 30 credits earth sciences; alternative B) 90 credits biology.	15
Plant Growth and Development	<p>The course gives an introduction to plant growth and development and aims to provide knowledge about molecular and physiological regulation of processes such as cell division, meristem activity, embryogenesis and organ development where plant hormones and other signalling mechanisms play a central role.</p> <p>The teaching includes lectures, guest lectures, group discussions, literature discussions, seminars and laboratory exercises.</p>	<p>Knowledge equivalent to 180 credits including 90 credits Biology and English B from upper secondary school or equivalent.</p> <p>As an alternative to the above, equivalent to 120 credits including 60 credits Biology of which at least 5 credits Genetics and at least 5 credits Plant Biology/Plant Physiology must be included. English skills equivalent to English B from upper secondary school.</p>	15

Swedish as a foreign language	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. The aim is to introduce students not only to the basic structures of Swedish, but also to the Swedish way of life. Simple everyday conversation is practised.	No prerequisites	No ECTS but an official language certificate
Spanish as a foreign language	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.	B1	No ECTS but an official language certificate