



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PLSoo88 Integrated Pest and Pollinator Management, 3.0 credits

Syllabus approved

2021-10-08

Subjects

Agricultural Science

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

Entry if enrolled at PhD level, or MSc with further justification.

Objective, including learning outcomes

Learning outcomes

The course will equip participants with the knowledge needed to translate IPPM concepts into action, towards meeting growing public demand for pollinator-dependant

crops, and reducing farmer reliance on chemical pesticides and agronomic inputs. Upon completion, course participants should be able to:

1. classify key practices and priorities within the IPPM systematic framework;
2. describe the essential role of pollination and biocontrol and means for their harmonisation;
3. plan coordinated strategies for IPPM implementation backed by monitoring and economic decision support tools.

Content

The PhD course ‘Integrated Pest and Pollinator Management’ covers basic principles for the design and implementation of IPPM strategies, focusing on the co-management of pests and beneficial organisms in agroecosystems.

The course will incorporate lectures, seminars (including student participation in a virtual international workshop: ‘pollinators & entomovectoring’), pre- and post-course assignments, problem-oriented group study, and hands-on training of concepts and tools in computer labs and the field (excursion to SITES Lönnstorp Research Station). Q&A sessions with industry experts and agricultural advisors will provide course participants with the opportunity to explore career development options.

Teaching will cover a range of theoretical and applied topics at the forefront of IPPM, including:

- The ecology and economics of interactions between crops, pollinators, pests (insects, weeds, pathogens), and natural enemies (insect and microbial biological control agents);
- Conflicts and synergies between crop pollination, pesticide use, and other IPM practices (e.g. companion cropping, biopesticides);
- Practical monitoring and decision support tools for IPPM (e.g. pollinator action thresholds);
- IPPM, pollinator health, and climate change;
- Industry, societal, and policy perspectives.

Requirements for examination

The course will be assessed on a pass/fail basis. The post-meeting assignment (i.e. an essay in which students will have had the opportunity to incorporate peer feedback) will provide the means to assess whether the learning outcomes have been met by each student.

Additional information

Schedule

- Class virtual introduction (2 h): October (date tbc) via zoom.
- Pre-assignments (40 h = 1.5 ECTS): Initial report and presentation on a proposed IPPM topic by 3 November 2022; virtual participation at international workshop IPPM 4 November 2022.
- Main course (22 h = 1 ECTS): 7-10 November, SLU Alnarp.
- Post-assignment (13 h = 0.5 ECTS): Final report (incorporating peer feedback) by 18 November.

Main course (7-10 November):

- Monday: Introduction lectures
- Tuesday: In-depth lectures
- Wednesday: field excursion
- Thursday: problem-orientated group study, closing lectures

The course will be assessed on a pass/fail basis. The post-meeting assignment (i.e. an essay in which students will have had the opportunity to incorporate peer feedback) will provide the means to assess whether the learning outcomes have been met by each student.

Responsible department

Department of Plant Protection Biology