

MSc Environmental Sciences / Forest Sciences / Biology
Module "Introduction to Hymenoptera"
Module plan "Wintersemester" 2021/22

Module coordination: Nolan J. Rappa (Professur für Naturschutz und Landschaftsökologie)

Lecturers: Nolan J. Rappa, Katharina Wittmann

Maximum number of participants: 13

Time: Introductory lecture: 3.11.2021, weekly lectures/exercises: 10.11.2021-15.12.2021, Holiday break: 23.12-06.01.2021, weekly lectures/guided exercises: 12.01-19.01.2021, Final Exam: 26.01.2021, Practical: 2.02.2021.

Location: Lecture room 01 101, 17:00-20:00

Exam form: Written (02.02), Practical (09.02)

Date	Lecture/Presentation topic	Practical exercise
03-Nov	Introduction to insect collection & preparation, Nolan J. Rappa	Specimen handling, morphotype sorting Assigning groups to individual students for presentations
10-Nov	Student presentation	Preparation, Identification and labelling of specimens in boxes
17-Nov	Student presentation, Introduction to entomology, Nolan J. Rappa	Preparation, Identification and labelling of specimens in boxes
24-Nov	Student presentation	Identification and labelling of specimens in boxes
1-Dec	Student presentation, Insect taxonomy, Katharina Wittmann	Identification and labelling of specimens in boxes
8-Dec	Student presentation	Identification and labelling of specimens in boxes
15-Dec	Student presentation, Hymenoptera Ecology & Conservation, Katharina Wittmann	Identification and labelling of specimens in boxes
12-Jan	Student presentation	Identification and labelling of specimens in boxes
19-Jan	Student presentation	Identification and labelling of specimens in boxes, Questions about the final exam
26-Jan	Student presentation	Identification and labelling of specimens in boxes, Questions about the final exam
2-Feb	No Lecture	Final Exam
9-Feb	No Lecture	Practical

Lecture topics

Lectures will be relatively short (~25 min.), and will prepare students for the tasks covered that day and subsequently in the course.

- Introduction to insect collection & preparation (3.11)
- Introduction to entomology (17.11)
- Insect Taxonomy (01.12)
- Hymenoptera Ecology & Conservation (15.12)

Individual student presentations

Each student will be randomly assigned a Family of solitary bees or wasps on the first day of the course. Each student will then give a presentation on the life history/identification of that group.

~ 10 minutes long, describes (what, where, why and how) one of the following groups:

- Megachilidae
- Apidae
- Ichneumonidae
- Crabronidae
- Pompilidae
- Vespidae
- Chrysididae
- Formicidae
- Colletidae
- Sphecidae
- Tenthredinidae
- Cynipidae
- Pteromalidae
- Eulophidae

Final Exam (40 % of final grade)

Final Exam will contain 25 questions about topics covered during lectures. Topics and questions will be reviewed before the final exam date.

Practical (60% of final grade)

The identification practical will be a hands-on exercise where students are given a small collection of insects they must correctly identify to species.

Course outcomes

It is our goal that by the end of this course all students will:

- Understand the importance of proper insect collecting for research,
- Have a basic understanding of entomology and insect taxonomy,
- Be able to identify the most commonly encountered bees and wasps