2024 Course Schedule for: BI1320 (May 2 – June 1)

**Bees, Apiculture and Pollination**

**Course Leader:**
Barbara Locke barbara.locke@slu.se at the Department of Ecology, SLU.

**Course Administrator:**
Maria Viketoft Maria.viketoft@slu.se at the Department of Ecology, SLU

**Language:**

The course is conducted in English.

**Lecturers on this course:**

BL = Barbara Locke – Honeybee ecologist @ SLU

ES = Emilia Semberg – Bee Centre coordinator/BMA @ SLU

OL = Ola Lundin – Agricultural ecologist @SLU

EÖ = Erik Öckinger – Conservation ecologist @SLU

AN = Amélie Noël \_ Honeybee biologist @ SLU

**Course Objectives**

After completing the course, the student is expected to:

* master the use of keys for species determination of insects,
* be able to determine solitary bees to family and common bumble bees to species,
* understand the importance of insect mediated pollination,
* be able to describe the ecological importance of social insects and the organization of honey bee colonies,
* be able to describe the genetic relationship between individuals in honey bee colonies and the sex determination system,
* know the most important honey bee diseases and parasites,
* be able to perform common measures related to beekeeping practices,

**Lectures and Excursions:**

Lectures and course materials will be uploaded into CANVAS.

Note that lectures will start at the times specified (not 15 minutes after). The course builds on concepts presented in earlier lectures so please try to attend all lectures. Lectures can often finish earlier and sometimes run a little longer than specified, but we try to keep time.

Excursions will be activities to gain hands-on experience and practical knowledge of the course content. These activities will be conducted outside and therefore the scheduling of these excursions can change due to weather. Bees are not happy in the rain.

**Locations:**

Bihuset = The Honeybee House beside the Knowledge Garden (kunskapsträdgården) on SLU campus

Sunnersta = Sunnersta Alpine Center just south of SLU campus.

F-salen = a lecture room in the ecology centre on the second floor of the F-corridor. From the bear, turn left towards the eagles and directly take a sharp left up the stairs to the top.

Kurs Lab = a lecture room in the ecology centre on the first floor in the D-korridor. In the back of the building by the greenhouses.

Bilab = The honeybee disease laboratory.

**\* Asterix denotes mandatory course work to pass course.**

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| **Day** | **time** | **Activity** | **Type of teaching / Location** | **Teacher** |
| **May 5**Monday | 09:00 – 15:00  | Introduction to course Evolution and diversity of bees  | F-salen | BL |
| **May 6**Tuesday | 09:00 – 12:0013:00 – 15:00 | Honey bee biology **Wild bees identification** | F-salenCourse lab | BL |
| **May 7**Wed | 9-12 | Beekeeping and beekeeping practices  | Fsalen  | BL |
| **May 8**Thursday |  |  **Excursion – Honeybees** | Bihuset  | BL, AN |
| **May 9**Friday |  | **Project work** |  |  |
| **May 12**Monday | 9:30 – 11:30 13:00 – 16:00 | Pollination biology Bumblebees biology |  F-salen | OLBL |
| **May 13**Tuesday | 9:30 – 11:30 13:00 – 1500 | **Excursion – Wild bees****Excursion – Honeybees** | Sunnerstabihuset | BL BL, AN |
| **May 14**Wed | 9:00 – 15:00  | **Wild bee identification** | Kurs lab | BL |
| **May 15**Thursday | 09:00 – 12:00 13:00– 16:00 | Bees and conservation biology**Excursion – Wild bees** | F-salen  | EÖBL |
| **May 16**Friday |  | **Project work** |  |  |
| **May 19**Monday | 09:00 – 12:0013:00 – 15:00 | Honey bee genetics and evolutionBee disease part 1) Viruses, Parasites Pests | F-salen  | BLJdM |
| **May 20**Tuesday | 09:00-12:0013:00 –15:00 | Honey bee immunity/Communication **Excursion – honeybees** | F-salenBihuset | ANBL, AN |
| **May 21**Wed | 09:30 – 12:0012:00 | More than honey film **Hand in project work 1\*** | Canvas |  |
| **May 22**Thursday | 09:00 – 12:00 13:00-15:00 | Bee disease part 2) Bacterial diseases, Fungi, EpidemiologyDemonstration of bee diseases in the lab/film discussion | F-salen | ESES,BL |
| **May 23**Friday |  | **Project work** |  |  |
| **May 26**Monday |  | Honey bee communication and learning |  | AN |
| **May 27**Tuesday | 09:00 - 15:00  | **Presentations of project work 2\*** | F-salen |  |
| **May 28**Wed |  | **STUDY DAY** |  |  |
| **May 29**Thursday |  | **Kristi himmelsfärdsdag** |  |  |
| **May 30**Friday |  | **Project work** |  |  |
| **June 2**Monday |  | **STUDY DAY Excursion- extracting honey** | Bihuset | BL,AN,ES |
| **June 3**Tuesday | 9:00 - 15.00 | **STUDY DAY** |  |  |
| **June 4**Wed | 9:00 – 12:00 | **EXAM** |  |  |
| **June 5**Thursday |  |  |  |  |
| **June 6**Friday |  |  |  |  |
| **Have a great summer** |