2021 Course Schedule for: BI1320 (3 May – 2 June)

**Bees, Apiculture and Pollination**

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

**Course Administrator:**
Joachim Stengbom joachim.strengbom@slu.se at the Department of Ecology, SLU

**Zoom and Canvas:**

Lectures will be delivered via Zoom and course materials uploaded into CANVAS.

**Note that lectures will start at the times specified** (not 5 minutes after), so please be on time since we will have small discussions throughout the lectures that build on concepts earlier in the lecture. Lectures can often finish earlier than specified.

**IRL Excursions:**

Excursions in real life will be activities to gain hands-on experience and practical knowledge of the course content. These activities will be conducted in smaller groups outside in open spaces to prevent the spread of covid-19. **The exact dates of these excursions can change due to weather. Bees are not happy in the rain.**

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

Sunnerstagropen/SLU = Either at Sunnersta Alpine Center or on SLU campus (to be decided).

**Language:**

The course is conducted in English.

**Lecturers on this course:**

BL = Barbara Locke – Honeybee ecologist @ SLU

EF = Eva Forsgren – Honeybee molecular biologist @ SLU

JM = Joachim de Miranda – Honeybee virologist @ SLU

CR = Chloë Raderschall – Pollination agroecologist @ SLU

EÖ = Erik Öckinger – Conservation Biologist @ SLU

MW = Matt Webster – Evolutionary genetisist @ UU

ES = Emilia Semberg – Laboratory Technician @ SLU

**\* dennotes manditory participation.**

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| **Day****(May)** | **time** | **Activity** | **Type of teaching / Location** | **Teacher** |
| Mon 3 | 9:15 – 10:0010:15 – 11:3013:15 – 16:00 | Introduction**Introduction to project work 1 and 2**Honeybee biology | Zoom  | JS, BL, EF,CR, BLJM |
| Tues 4 | 9:15 – 11:0013:15 – 15:00 | Evolution of bees and the diversity of solitary beesBee identification  | Zoom | CRBL |
| Wed 5 | 10:15 – 12:00 13:15 – 16:00 | Beekeeping and beekeeping practices**Excursion – Wild bees** |  Sunnersta/SLU | BLBL, CR |
| Wed 5 | 10:15 – 12:0013:15 – 15:00 | **Excursion – Honeybees** |  Bihuset  | BL |
| Thurs 6 |  | **Project work** |  |  |
| Fri 7 |  | **Project work** |  |  |
| 8,9 |  |  |  |  |
| Mon 10 | 10:15 – 12:00 13:15 – 15:00 | Bumblebees Bees and conservation biology? | ZoomZoom | CREÖ |
| Tues 11 | 10:15 – 12:00 13:15 – 16:00 | Pollination Biology **Excursion – Wild bees** | ZoomSunnersta/SLU | CRBL, CR |
| Wed 12 | 10:15 – 12:00 | Honey bee genetics  | Pre-recorded in Canvas | MW |
| Thu 13 |  | **Kristi himmelsfärdsdag – Red day**  |  |  |
| Fri 14 | L | **Project work** |  |  |
| 15,16 |  |  |  |  |
| Mon 17 | 10:15 – 12.0013:15 – 15:00 | Bee diseases part 1) Epidemiology, Bacterial diseasesBee disease part 2) Viruses, Parasites Pests | ZoomZoom | EFJM |
| Tue 18 | 10:15 – 12:0013:15 – 15:00 | **Excursion – honeybees** | Bihuset | BL |
| Wed 19 | 10:15 – 12:00  | Demonstration of the bee lab at SLU and bee diseases | Pre-recorded films in Canvas | EF, ES |
| Thur 20 |  | **Project work** |  |  |
| Fri 21 |  | **Project work** |  |  |
| 22,23 |  |  |  |  |
| Mon 24 |  | **Hand in project work 1\*** | Canvas |  |
| Tues 25 |  | **Project work** |  |  |
| Wed 26 | 13:15-16:00 | **Excursion – Honeybees** | Bihuset | BL |
| Thur 27 | 13:15-16:00 | **Excursion – Honeybees** | Bihuset | BL |
| Fri 28 |  | **Project work** |  |  |
| 29, 30  |  |  |  |  |
| Mon 31 |  | **Hand in project work 2\***  | Canvas |  |
| (June)Tue 1 | 9:15 – 12:0013:15 – 15:00 | **Presentations of project work 2\*** | Zoom | JM; EF, BL |
| Wed 209:15-15:00 | 9:15 – 15:0013:15 – 15:00 | **Presentations of project work 2\*** |  Zoom | JM; EF, BL |