

001-2-3039 Evolutionary Ecology of Parasitism 3 credits

Lectures (hrs./week)	Exercise (hrs./week)	Laboratory	Field Trip
3			

Parasites have evolved under selective pressures that are not the same as those acting on free-living organisms. The course is aimed to demonstrate those selective forces and to show how they have shaped the ecology of parasites and their hosts over evolutionary time.

**Syllabus**

The list of topics:

1. Introduction and Definitions.
2. Origin of Parasitism and Complex Life Cycles.
3. Host Specificity.
4. Evolution of Life History Strategies in Parasites.
5. Strategies of Host Exploitation.
6. Parasite Aggregation: Causes and Consequences.
7. Parasite Population Dynamics.
8. Interactions between Parasite Species.
9. Parasite Infracommunity Structure.
10. Component Communities and Parasite Faunas.
11. Parasites and Environment.
12. Parasites and Host Ecosystem.

**Lecturer:** Boris Krasnov

**Reading:**

1. R. Poulin. Evolutionary ecology of parasites: from individuals to communities
2. C. Combes. Parasitism
3. R. Poulin, S. Morand, A. Scorping (eds). Evolutionary biology of host-parasite relationships: theory meets reality
4. C. Combes. The art being a parasite.