

(3 credits) 001-2-3023

Prerequisite: Introduction to ecology; Animal behavior; Animal Physiology

Further Information: The course is open to students with a B.Sc. in biological sciences and to graduate students in biological sciences. Students with adequate qualifications from other fields (e.g. engineering) will be considered.

The number of participants is limited and acceptance will be based upon academic criteria.

The cost of participation depends on the number of students and on external funding.

10-day intensive course - 20 hours

Field Trip - 5

The focus of the course is on predator-prey interactions in desert dwelling bats, emphasizing ecological aspects of echolocation. The first half of the course will comprise lectures by the course instructors, presentation of seminars by the participating students, and discussion forums. The second part of the course will be dedicated to field projects under guidance of the course instructors. Aside from theory and background students will have the opportunity to familiarize themselves with all the basic tools of fieldwork with bats:

- Use of hand nets, mist nets and canopy nets to capture bats;
- Handling and identification of live bats;
- Use of electronic bat detectors and call recorders;
- Computerized techniques of echolocation call analysis
- Use of visual tagging devices to study foraging behaviour and habitat use by bats
- Advanced data analysis techniques

Assignments and grading: Lecture attendance is obligatory.

Seminar presentation (20%) - subjects will be chosen by participants prior to the course for delivery during the first week. Namely, there will be significant interaction between enrolled students and instructors before the course begins.

Participation in the field work (40%).

Report on field project written in the form of a scientific paper (40%). This report will be due 4 weeks after the course ends.

Keywords:

Insectivorous bats, Echolocation, Bat detectors, Foraging behavior, Predator-prey interactions

Lecturer: C. Korine, B. Pinshow and instructors from aboard

Recommended Reading:

Altringham, J.D. (1996). Bats: Biology and Behaviour. Oxford University Press, London

Fenton, M.B. (2001). Bats: Revised Edition. Facts On File Inc., New York (also available in paperback from

Fitzhenry and Whiteside, Toronto.

Kunz, T.H. and M.B. Fenton (editors). (2003). Bat Ecology. University of Chicago Press, Chicago.

Additional Reading: Papers will be distributed after registration