This course provides theoretical and practical experience in zoology, evolutionary biology and other fields in biology. A major part of the course consists of planning and carrying out a research project. Along this line, points like development and writing of a research project, scientific writing, scientific presentation and discussion of current research topics are introduced. The course topics and the research projects are representative of the ongoing research in the Zoology groups in Basel.

The practical part of the course lasts six weeks (there is compulsory attendance). Thereafter, there are two weeks for exam preparations. The final grade is determined by the exam and the practical work.

Selected topics of the course are:

- Animal body plans and development/Developmental genetics
- Organismal evolution
- Molecular evolution
- Behavioral ecology
- Experimental zoology

The main emphasis of the course is practical work, for example in:

- Anatomy and histology
- Microscopy, image analysis and morphometrics
- DNA-and RNA sequencing
- Phylogenetics and population genetics
- Experimental design
- Data analysis

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