

Module Handbook (<https://modhb.uni-kl.de/>)

TUK (<https://www.uni-kl.de>) MODHB (<https://modhb.uni-kl.de/>) Homepage (/)

### Notes on the module handbook of the department Biology

The below displayed informations on the courses of study, modules and courses of the department of Biology are still under construction. Till this process will be finished please use our module handbooks on

<https://www.bio.uni-kl.de/studium-lehre/studiengaenge/> (<https://www.bio.uni-kl.de/studium-lehre/studiengaenge/>)

## Course BIO-TPH-04-K

Physiological, biological and clinical aspects of hearing (4V, 6.0 LP)

### Course Type

SWS	Type	Course Form	CP (Effort)	Presence-Time	Self-Study
4	V	Lecture	6.0 CP	56 h	124 h
(4V)			6.0 CP	56 h	124 h

### Basedata

SWS	4V
CP, Effort	6.0 CP = 180 h
Position of the semester	1 Sem. in SuSe
Language	[DE/EN] German or English as required
Lecturers	Friauf, Eckhard, Prof. Dr. (PROF   DEPT: BIO) (/staff/90/)
Area of study	[BIO-TPH] Animal Physiology
Lifecycle-State	[NORM] Active

### Notice

Studierende können auch den Physikteil oder den Biologieteil allein belegen. In diesem Fall werden je 2 SWS und 3 CP angerechnet.

### Possible Study achievement

- Verification of study performance: **written exam and seminar paper**

## Contents

Biological Topics: From outer ear to cochlea; evolution of auditory ossicles; hair sensory cells; mechanical-electrical transduction; active cochlear amplifier (prestin); K<sup>+</sup>-circulation; adaption of transduction; ontogenesis inner ear; degeneration and regeneration; genetic aspects of deafness; central auditory system: auditory brainstem, telecephalon; sound localization, space maps; olivocochlear system; echolocation; speech

## Literature

Literature will be disclosed during the lecture.

## Requirements for attendance (informal)

Target audience: Predominantly students of Biology, Biophysics, and Electrical Engineering (4th semester and higher)

## Requirements for attendance (formal)

None

## References to Course [BIO-TPH-04-K]

Module	Name	Context	
[BIO-TM1-M-4#7 (/mhb/modules/BIO-TM1-M-4%237/)]	Theoriemodul 1: „Biologische und Biologie-verwandte Theorie“	WP: Obligation to choose	4V, 6.0 LP