

Course offer of the PhD Program

“Auditory Sciences: Physics and Engineering, Physiology and Therapy of Hearing”

For further information and registration, please contact (if not noted otherwise):

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for courses in Hannover

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for courses in Oldenburg

Obligatory courses:

Title	Instructor(s)	Credit	Time and place
1.1 Clinic, Diagnostic and Therapy of Peripheral and Central Hearing Disorders	Prof. Thomas Lenarz	25 hours 3 CP	MHH building K6, node B, 6 th floor, seminar room S66 On request
1.2 Audiology and Physics of Hearing	Prof. Hannes Maier	15 hours 11,5 CP	MHH NIFE, M20-01-1140 Date t.b.d.
1.3 Sensory Neuroscience	Prof. Andrej Kral	25 hours 3 CP	MHH NIFE, M20-01-1140 On request
1.4 Imaging Methods in Medicine	Prof.'in Lilli Geworski	25 hours 3 CP	MHH Building K7, floor S0, seminar room 1321 Date t.b.d.
1.5 Psychophysical Methods in Hearing Research	Prof. Andreas Büchner	15 hours 1,5 CP	MHH Seminar room “DHZ”, Hannover Date t.b.d.
1.6 Audio signal processing	Prof. Waldo Nogueira	15 hours 1,5 CP	MHH Hannover Date t.b.d.
1.7 Introduction to Biomaterials, Laser Spectroscopy and Microelectronics	Prof. Andreas Heisterkamp, Prof. Holger Blume	25 hours 3 CP	LUH Date t.b.d.
1.8 Fundamentals in Auditory Physiology	Prof.'in Christine Köppl, Prof. Georg Klump	30 hours 3 CP	UOL, online Block course during SuSe
1.9 Summer School and Internal Retreat	N.N.	20 hours 2 CP	For details please visit: https://hearing4all.de/en/career/joint-research-academy/summer-school/

Elective courses at MHH:

Title	Instructor(s)	Credit	Time and place
2.1 Nanotechnology in Medicine	Prof. Theo Doll	12 hours 1 CP	MHH, NIFE On request
2.2 Sound Coding Strategies and Signal Processing Methods for Cochlear Implants and Hearing Aids	Prof. Waldo Nogueira	15 hours 1.5 CP	MHH On request
2.3 Neural Signal Processing	Prof. Waldo Nogueira	15 hours 1.5 CP	MHH On request
2.4 Biomedical Technology	PD Dr. Omid Majdani	10 hours 1 CP	MHH On request
2.5 Medical Image Processing for Medical Applications	PD Dr. Omid Majdani, Thomas Rau	12 hours 1-1.5 CP	MHH On request
2.6 Modulation of Basal Ganglia Activity in Movement Disorders by Functional Neurosurgery	Prof. Joachim Krauss	1.5 hours	MHH On request
2.7 Animal Models for Psychiatric Disorders	Prof.'in Kerstin Schwabe	1.5 hours	MHH On request
2.8 Auditory Plasticity	Prof. Andrej Kral	25 hours 3 CP	MHH, NIFE On request
2.9 Scientific Writing	Prof. Andrej Kral	30 hours 3 CP	MHH, NIFE On request
2.10 Statistical Approaches in Auditory Sciences	Prof. Andrej Kral, Dr. Wiebke Konerding	10 hours 1 CP	MHH NIFE M20-01-1140 On request
2.11 Lab Meeting Otolaryngology	N.N.	1 hour / meeting	MHH NIFE, M20-S0-2520, Wed noon
2.12 Journal Clubs	Prof. Andrej Kral Prof. Waldo Nogueira	1 hour/ meeting	MHH
2.13 Hearing(4all) Research Seminar	N.N.	1 hour / meeting	MHH Place: t.b.a.; Contact: baumhoff.christine@mh-hannover.de

2.14 Colloquium Medical Physics	Prof.'in Lilli Geworski	1 hour / meeting	MHH, building K7, floor S0, seminar room 1321 Every second Tue 3–4 pm Registration required!
2.15 Lunch seminar Radiology	Prof.'in Lilli Geworski	1 hour / meeting	MHH Radiology Wed 12–1 pm Registration required!
2.16 Colloquium Radiology	Prof.'in Lilli Geworski	1 hour / meeting	MHH Radiology Tue 8:15–9:00 am Registration required!
2.17 Audio Signal Processing for Cochlear Implants and Hearing Aids in Python	Prof. Waldo Nogueira	15 hours 2 CP	MHH, NIFE On request

Elective courses at LUH:



Title	Instructor(s)	Credit	Time and place
2.18 Basics of Digital Systems	Prof. Holger Blume	12 hours 1 CP	LUH / IMS Seminar room 335 Appelstr. 4, 3 rd floor On request

Elective courses at UOL:

Title	Instructor(s)	Credit	Time and place
2.19 Aktuelle Themen der Akustik, Signalverarbeitung und Medizinischen Physik	Prof. Simon Doclo, Prof. Volker Hohmann, Prof. Birger Kollmeier, Prof. Steven van de Par	25 hours 3 CP	UOL Tue 2:15–3:45 pm
2.20 Oberseminar Signal- und Sprachverarbeitung	Prof. Simon Doclo	25 hours 3 CP	UOL Mon 10:15–11:45 am
2.21 Oberseminar Medizinische Physik	Prof. Birger Kollmeier	25 hours 3 CP	UOL Tue 10:15–11:45 am
2.22 Psychophysik und Audiologie	Prof. Birger Kollmeier, Prof. Steven van de Par, Dr. Stephan Ewert	50 hours 6 CP	UOL WiSe: Tue 8:15–9:45 am & Fri 8:15–9:45 am
2.23 Advanced Topics of Speech and Audio Processing	Prof. Simon Doclo	25 hours 3 CP	UOL WiSe: Mon 4:15–7:45 pm & Thu 12:15–2:45 pm
2.24 Clinical Neuropsychology	Prof. Stefan Debener	25 hours 3 CP	UOL WiSe: Thu 10:15–11:45 am
2.25 Sprachverarbeitung	Prof. Bernd Meyer	25 hours 3 CP	UOL SuSe: Tue 2:15–3:45 pm
2.26 Digital Signal Processing	Prof. Simon Doclo	25 hours 3 CP	UOL SuSe: Mon 4:15–5:45 pm
2.27 Neurophysik (Neurokognition)	Prof. Volker Hohmann, Dr. Stefan Uppenkamp	25 hours 3 CP	UOL SuSe: Tue 4:15–5:45 pm
2.28 Akustik	Prof. Steven van de Par, Prof. Birger Kollmeier, Dr. Stephan Ewert	50 hours 6 CP	UOL SuSe: Tue 4:15–5:45 pm & Fri 8:15–9:45 am

Combined electives:



Medizinische Hochschule
Hannover



2.29 Combined Hot Topic Seminar (Web Conference)	Dr. Christine Baumhoff, Dr. Mark Pottek	1 h / seminar	MHH/UOL/LUH Dates t.b.a.
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