

PhD-Programme
“Auditory Sciences: Physics and Engineering, Physiology and Therapy of Hearing”
SuSe2019

For further information and registration please contact (if not noted otherwise):
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ira.courses@hearing4all.de

Obligatory courses:

red: obligatory courses for all students; black: electives for UOL and LUH, obligatory for MHH

Title	Course organiser	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	10 hours 1 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 Participants: 5–20 students On request
1.5 Psychophysical Methods in Hearing Research	Prof. Andreas Büchner	10 hours 1 CP	MHH Seminar room “DHZ”, Hannover 6–7 June 2019
1.6 Introduction to Biomaterials, Laser Spectroscopy and Microelectronics	Prof. Peter Behrens, Prof. Andreas Heisterkamp, Prof. Holger Blume	25 hours 3 CP	LUH 8–11 April 2019 Registration until 11 March 2019
1.7 Fundamentals of Auditory Physiology	Prof.'in Christine Köppl, Prof. Georg Klump	30 hours 3 CP	UOL 3–7 June 2019 Registration until 26 April 2019
1.8 Summer School and Internal Retreat	N.N.	20 hours 2 CP	27–29 August 2019 Location: Seminarhotel Luisenhof, Visselhövede

Elective courses at MHH:

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	Jun.-Prof. Waldo Nogueira	15 hours 1.5 CP	MHH NogueiraVazquez.Waldo@mh-hannover.de On request
2.3 Neural Signal Processing	Jun.-Prof. Waldo Nogueira	15 hours 1.5 CP	MHH NogueiraVazquez.Waldo@mh-hannover.de 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, Georg-Jakob Lexow	12 hours 1-1.5 CP	MHH On request lexow.jakob@mh-hannover.de
2.6 Modulation of Basal Ganglia Activity in Movement Disorders by Functional Neurosurgery	Prof. Joachim Krauss	1.5 hours	MHH building K6, node B, 05 th floor, seminar room 65 krauss.joachim@mh-hannover.de
2.7 Animal Models for Psychiatric Disorders	Prof.'in Kerstin Schwabe	1.5 hours	MHH building K6, node B, 05 th floor, seminar room 65 schwabe.kerstin@mh-hannover.de
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, Wednesdays 5–6 pm
2.12 Journal Club (Neuroscientific Studies on Humans)	N.N.	2 hours / meeting	MHH, building K5, node B, 3 rd floor, seminar room 63, last Wednesday of the month 11 am – 1 pm

2.13 Hearing(4all) Research Seminar	N.N.	1 hour / meeting	MHH Wednesdays every second month; 5–6 pm; Place: tba 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 Tuesday 3–4 pm, Registration required
2.15 Lunchseminar Radiology	Prof.'in Lilli Geworski	1 hour / meeting	MHH Radiology Wednesdays, 12 am – 1 pm Registration required
2.16 Colloquium Radiology	Prof.'in Lilli Geworski	1 hour / meeting	MHH Radiology Tuesdays 08:15–09:00 am Registration required
2.17 HNO-Meeting	Prof.'in Lilli Geworski	1 hour / meeting	MHH Neuroradiology Date on request Registration required
2.18 Audio Signal Processing for Cochlear Implants and Hearing Aids in Python	Jun.-Prof. Waldo Nogueira	15h/2 CP	MHH, NIFE On request

Elective courses at the University of Veterinary Medicine Hannover, Foundation:

<p>2.19 Neurobiology of Acoustic Communication and Orientation</p>	<p>Prof.'in Elke Zimmermann, PD Dr. Sabine Schmidt</p>	<p>25 hours 3 CP</p>	<p>TiHo, Bünteweg 17, jasmin.ouakidi@tiho-hannover.de Participants: 4–8 students</p>
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Elective courses at LUH:

<p>2.20 Basics of Digital Systems</p>	<p>Prof. Holger Blume</p>	<p>12 hours 1 CP</p>	<p>LUH / IMS Seminar room 335 Appelstr. 4, 3rd floor Hannover</p> <p>On request 10 am – 1 pm, 2–5 pm (daily)</p>
<p>2.21 Application-Specific Instruction-Set Processors for Hearing Aid Systems</p>	<p>Jun.-Prof. Guillermo Payá Vayá</p>	<p>12 hours 1 CP</p>	<p>LUH / IMS Seminar room 335 Appelstr. 4, 3rd floor Hannover</p> <p>On request 10 am – 1 pm, 2–5 pm (daily)</p>
<p>2.22 Principles of Signal Processing in MATLAB</p>	<p>Jun.-Prof. Guillermo Payá Vayá</p>	<p>12 hours 1 CP</p>	<p>LUH / IMS Seminar room 335 Appelstr. 4, 3rd floor Hannover</p> <p>On request 10 am – 1 pm, 2–5 pm (daily)</p>

Elective courses at UOL:

2.23 Einführung in die Sprachverarbeitung	Jun.-Prof. Dr. Marc-René Schädler	25 hours 3 CP	UOL Weekly: Wed 2–4 pm W32 1-113
2.24 Aktuelle Probleme der Akustik, Signalverarbeitung und Medizinischen Physik	Dr. Jörn Anemüller, Prof. Simon Doclo, Prof. Volker Hohmann, Prof. Birger Kollmeier, Prof. Björn Poppe, Dr. Stefan Uppenkamp, Prof. Steven van de Par	25 hours 3 CP	UOL Weekly: Tue 2–4 pm W02 1-148
2.25 Oberseminar Signal- und Sprachverarbeitung	Prof. Simon Doclo	25 hours 3 CP	UOL Weekly: Mon 10 am – 12 pm
2.26 Artificial Intelligence, Biological Intelligence and Learning	Prof. Jörg Lücke, Dr. Jörn Anemüller	25 hours 3 CP	UOL Weekly: Thu 10 am –12 pm W02 1-122
2.27 Digital Signal Processing	Prof. Simon Doclo	50 hours 6 CP	UOL Weekly: Mon 4–6 pm & Wed 10 am –12 pm
2.28 Oberseminar Medizinische Physik	Dr. Stefan Uppenkamp, Prof. Volker Hohmann, Dr. Thomas Brand	25 hours 3 CP	UOL Weekly: Tue 10 am – 12 pm W32 1-112
2.29 Current Topics in Machine Learning and its Applications	Prof. Jörg Lücke	25 hours 3 CP	UOL Weekly: Wed 2–4 pm W02 2-216
2.30 Akustik	Prof. S. van de Par, Dr. S. Ewert, Prof. B. Kollmeier	50 hours 6 CP	UOL Weekly: Tue 4–6 pm, W02 1-143 & Fri 8–10 am, W03 1-161

Combined electives:

2.31 Combined Hot Topic Seminar (Web Conference)	Dr. Christine Baumhoff, Dr. Mark Pottek	1 h / seminar	28 June 2019 10–11 am
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