

Signal theory for audiologists 2023

Events marked with a * are compulsory. Color code: Lectures; Student activity/Lab/Exercise, Student presentation/examination

week	date	time	place	event	teacher
35	Mon 28/8	*9-14	S202 ANA 23 plan 2	Introduction and Lecture 1: Signals and spectra	ME
		*14-16 *17	S301 Ursula ANA 23 plan 3	Lab 1 Wave synthesis: building signals (exercise in Excel) Lab 1 Wave synthesis: upload to Canvas before 5 pm	ME
	Tue 29/8	8-9		Video lecture: Fourier transform	
		*9-12	S202 ANA 23 plan 2	Follow-up on lab 1; Lecture 2: Signals and spectra, Fourier transform	ME
		13-15	S301 Ursula ANA 23 plan 3	Intro to Wavesurfer; Lab 1 Wave analysis (tasks 1-2), Exercises 1 (tasks 1-3)	ME
		*		Quiz Signals and Spectra	
	Wed 30/8	*9-12	S202 ANA 23 plan 2	Lecture 3: From analogue to digital signals.	ME
		13-15	S301 Ursula ANA 23 plan 3	Lab 1 Wave analysis (tasks 3-7)	ME
	Thu 31/8	*9-12	Zoom	Lecture 4: Power and sound level of acoustic signals	ME
		13-15	Zoom break-out rooms	Exercises 1 (tasks 4-7),	
	Fri 1/9	*9-15	S202 ANA 23 plan 2	Presentations of solutions to Lab 1 and Exercises 1	
36	Mon 4/9	*9-17	Hårcellen, ANA 10	Oral seminar 1 - basic signal theory (30-45 min per group)	ME
	Tue 5/9	*9-12	S202 ANA 23 plan 2	Lecture 5: Intro to Systems, homogeneity	ME
		13-15		*Quiz on linearity, Exercises 2 (task 7)	
		13-	PhEar	Second chance: Lab 1 and Ex 1 presentations	
	Wed 6/9	*9-12	S202 ANA 23 plan 2	Sign-up for lab 2; Pick 'My system' topic Lecture 6: Signals and systems, LTI	ME
		afternoon		*Quiz on hearing aid programs' linearity, Exercises 2 (tasks 1-6) /Exercise: A walk through the auditory system (book Ch 12) Second chance: Small group seminars on basic signal theory	
	Thu 7/9			Study day: Finish Exercises 2: Start prepare 'My system' topic	
Fri 8/9	10-12	Zoom	Study day; Follow up on Exercises; Prepare 'My system' topic	ME	

37	Mon 11/9	*9-9:30 9:45-12 *13-14	Zoom Zoom	Briefing: Report writing guidelines, assessment criteria Lecture 7: Signal processing in hearing aids. Intro to our measuring systems (lab 2) Prepare for lab 2 : Videolecture on resonance	ME ME ME
	Tue 12/9	*8-17	PhEar, ANA 10	Lab 2: Hearing aid as a system & Report writing	ME
				Parallel activities: Tube resonance system (demo video and assignment)	
	Wed 13/9	*9-13	PhEar, ANA 10	Lab 2: Hearing aid as a system & Report writing	ME
		*14-15	Zoom	Follow-up on hearing aid laboration	ME
	Thurs 14/9	*12 *13-17 *24	Deadline	Report writing on hearing aid laboration: send to peer group Peer review Upload report with peer-review comments to Canvas	
	Fri 15/9	*12 em	Deadline	Correct report and upload final report to Canvas Prepare: 'My system' topic	
38	Mon 18/9			Study day: Prepare: 'My system' presentation	
	Tue 19/9	*9-17	515 ANA 10 plan 5	*Symposium: My system (presentations on e.g. impulse response, sources of nonlinearity in auditory system/hearing aids)	ME
	Wed 20/9	9-11 Drop-In	Zoom	Study day (question catalogue) Question forum Time slot for second/third chances	
	Thu 21/9	*9 -17	Hårcellen, ANA 10	Oral examination in small groups: On signals and systems (45 min, compulsory)	ME
	Fri 22/9	*9-12	515 ANA 10 plan 5	Course summary/Feedback	ME

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