

SNO	Date	Lecture	Assignment/Code link	Video to watch at	Video to watch b	Readings to be c	Readings to be completed before class
1		1-Aug-25 Introduction and installing stuff					resources: https://github.com/rdgao/coogs118c
2		5-Aug-25 Practical session: Basics of time and time-freq analyses and Ini	Dr. Vishnu Sreeek	Dr. Vishnu Sreeek	ch 1,2,3,4		
3		8-Aug-25 Time-Frequency Analysis Details		Dr. Vishnu Sreeek	ch 5,6		
4		12-Aug-25 EEG design, TF analysis exercises - in class					
		15-Aug-25 HOLIDAY					
		19-Aug-25 Preprocessing and EEC artifacts			ch 7,8		
		22-Aug-25 Preprocessing and EEG artifacts practical session - Aruneeek			ch 9	VS not on campus	
		26-Aug-25 Visit EEG lab at UoH or IITH; email Ramesh Mishra/Neeraj Kumar in advance (arrange an EEG experiment with Aruneeek's help, one volu VS not on campus)					
QUIZ 1		29-Aug-25 QUIZ 1					
		2-Sep-25 Project meeting with TA, selection of topics, datasets, and team members				VS not on campus	
		6-Sep-25 project assignment					
		9-Sep-25 Time domain EEG and analysis practical session		take-home assignment			
		12-Sep-25 Dot product, convolution, DFT, FFT, convolution theorem			ch 10, 11		
		16-Sep-25 Morlet wavelets, extracting power and phase			ch 12, 13		
		19-Sep-25 FFT and morlet wavelet practical session					
MIDSEM.		23-Sep-25 MIDSEM					
		26-Sep-25					
		30-Sep-25 Bandpass & Hilbert Transform w/ in-class exercises			ch 14		
		3-Oct-25 design IIR and FIR filters in MATLAB - practical session					
		7-Oct-25					
		10-Oct-25 short-time fft and multitapers		skipping ch 17	ch 15, 16		
		14-Oct-25 T-F power and baseline normalization w/ in-class exercises.		give take-home i	ch 18	papers like this have open data and code https://www.nature.com/articles/942003-021-02426-1#data-availability	
		17-Oct-25 ITPC w/ in-class exercises		aruneeek please r	ch 19		
		21-Oct-25 HOLIDAY					
		24-Oct-25 online project meet w/ ta					
QUIZ 2,		28-Oct-25 quiz 2					
		31-Oct-25 Differences between pow, itpc, etc and interpretational issues			ch 20, 21		
		4-Nov-25 Spatial filters					
		7-Nov-25 PCA and ICA			ch 22		
		11-Nov-25 Connectivity overview			ch 23		
		14-Nov-25 connectivity details					
		18-Nov-25 stats overview and details					
		practical session: connectivity					
		practical session: stats					
		project presentations					