EE479 Lecture Plan – Fall 2008

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Lec #	Date Nominal date	Topic	Read	Hmwk **DUE:**
		Multi-User Fundamentals - Chapter 12		
1	**8/19 1:00-2:15** 9/24 - tape	Multi-user Channels:	12.1	
2	**8/19 2:30-3:45** 9/29 – tape	Rate regions and Detection	12.1	
3	**8/20 3:00-4:15** 10/1 - tape	General Multiple User	12.2	PS1
4	**10/3** 10/6 – no tape	Gaussian multiple access "G" DFE	12.2	
5	10/8 10/8	Dirty paper precoding and Broadcast Channels Scalar duality	12.3	PS2
6	**10/10** 10/15 – no tape	Interference Channel	12.4	
		The Multiple Access Channel – Chapter 13		
7	10/13	Vector Gaussian MAC modeling and SWF	13.1	
	10/15			PS3
8	10/20	I Iterative Water-filling	13.2	
9	10/22	Vector DMT	13.3	PS4
10	10/27	Minimum Energy-Sum Problem		
11	10/29	Mohseni's Algorithm	13.4	PS5
--	**11/3**	**Midterm Exam** (open book, in class)	13.5	
		The Broadcast Channel – Chapter 14		
12	11/5	Broadcast Models	14.1,2	
13	**11/7** 11/10	Precoders	14.3	
	11/12			PS6
14	11/17	VDMT and Implementations	14.4	
15	11/19	Duality and Calculation of Capacity Region	14.5	PS7
		The Interference Channel – Chapter 15		
16	**11/ 21** 11/12	Basics and IW approach	15.1,2	-
17	12/1	Optimal Spectrum Balancing	15.3	PS8
18	**12/3**	Band Preference -- **distribute final – 16:30**	15.4	
--	**12/4**	**Collect final– 16:30**		

Grading: midterm 30% , final 40% , homework (ok to talk with other students currently in class, but no use of previous students or their solutions) 30%.