

EE 359 - Wireless Communications - Fall 2009

Tentative Syllabus

Lecture #	Date	Topic	Required Reading
<u>Introduction</u>			
1	9/23	Overview of Wireless Communications	Chapter 1 and Appendix D
<u>Wireless Channel Models</u>			
2-3	9/25* - 9/28	Path Loss and Shadowing Models	<u>Lec 2:</u> Section 2.1 to 2.6 <u>Lec 3:</u> Section 2.7 to 2.10
4-5	9/30-10/05	Statistical Fading Models, Narrowband Fading	<u>Lec 4:</u> Section 3.1 to 3.2.1 <u>Lec 5:</u> Section 3.1 to 3.2
6	10/7	Wideband Fading Models	Section 3.2 to 3.3
<u>Wireless Techniques and Their Performance, Wireless Networks</u>			
7	10/9*	Capacity of Wireless Channels	Chapter 4
8-10	10/19-10/23*	Digital Modulation and its Performance	<u>Lec 8:</u> Chapter 5 <u>Lec 9:</u> Chapter 6
11	10/26	Diversity	Chapter 7
12	10/28	Adaptive Modulation	Section 9.1 to 9.2
MT	11/2	Midterm (Tentative)	Chapters 2 to 7
14	11/4	Practical Considerations in Adaptive Modulation	Section 9.3
15	11/9	Multiple Input/Output Systems (MIMO)	<u>Lec 13:</u> Section 10.1 to 10.2 and Appendix C <u>Lec 14:</u> Section 10.3 to 10.5
16	11/11	Adaptive equalization.	
17	11/16	Multicarrier Modulation and OFDM	Chapter 12
18	11/18	Spread Spectrum and CDMA	Chapter 13
19	11/30	Multiuser systems and wireless networks	Sections 14.1 to 14.4, 15.1 to 15.2, 16.1 to 16.3
20	12/2	Course Summary	
Final	12/9	Final (8:30-11:30 am)	

There is no class on 9/21 (first day), 10/12, 10/14. We will have makeup lectures on Fridays 9/25, 10/9 and 10/23. The makeup lecture will be tentatively from 12:10-1:40pm and will have free pizza for lunch at noon.