

EE381V Advanced Wireless: Modulation and Multiple Access
Prof. Andrews, Fall 2006

Tentative Syllabus

<i>Week</i>	<i>Tuesday</i>	<i>Thursday</i>	<i>In/Out (all on Thurs, unless indicated)</i>
Aug 28	NO CLASS	Introduction and Overview	
Sept 4	Channel Models – Path Loss	Statistical & Narrowband Channels	HW1 Out
Sept 11	Channel Models – Wideband Channels, level crossing rate	Fading Channel Capacity	HW2 Out, HW1 In
Sept 18	Digital Modulation in Wireless Channels	Performance of Dig. Modulation in wireless	HW3 Out, HW 2 In
Sept 25	NO CLASS: Austin Wireless Summit	Spatial Diversity (receive)	HW4 Out, HW3 In
Oct 2	Spatial Diversity (transmit)	Adaptive Modulation I	HW5 Out, HW4 In
Oct 9	Adaptive Modulation II	Multicarrier Modulation Overview/Review	Proj. Proposal In
Oct 16	Multiple Access Overview	EXAM I (through Multicarrier)	HW5 In (Wednesday)
Oct 23	CDMA I	CDMA II	HW6 Out
Oct 30	<i>Wan Choi</i> : CDMA III	Multiuser Channel capacity	--
Nov 6	Multiuser Diversity	Exploiting Multiuser Diversity	HW7 Out, HW6 In
Nov 13	MIMO I	MIMO II	--
Nov 20	MIMO III	NO CLASS: Thanksgiving	HW7 In (Wednesday)
Nov 27	Project Self-Study <i>Globecom</i>	Project Self-Study <i>Globecom</i>	--
Dec 4	Ad hoc and mesh networks I	Ad hoc and mesh networks II	Final Proj. Report due Dec. 8, 5pm.

Exam 2: Given during final exam slot, 7-10pm Thursday Dec 14.

Notes:

- Quizzes most Thursdays, review of past week and quiz every Tuesday (about 10 minutes each).
- Exam Dates are locked after third week of class, but other topics and what the exams cover are subject to our progress.
- Exams are evenly weighted and 2nd exam will likely allow students 2 hours.