

Course Syllabus
EE 5367
Spring, 2014
T-Th 9:30 – 10:50 am
Architecture, Room 204

Instructor: Prof. Jonathan Bredow

Office: Room 522 Nedderman Hall

Office Hours: To be determined

Phone: 817-272-3934

Mailbox: Room 549 Nedderman Hall

Email: jbredow@uta.edu

Instructor WWW site: <https://www.uta.edu/mentis/public/#profile/profile/view/id/225/category/1>

Course WWW site: TBA

Required Textbook(s): J.D. Parsons, The Mobile Radio Propagation Channel, 2nd ed., John Wiley & Sons, Ltd, 2000.

Reference Materials: To be announced.

Course Description: Fundamental principles and techniques of electromagnetic wave propagation as it applies to current wireless and cellular systems, development of models of propagation and their application in wireless system design, characteristics of microwave devices used in wireless systems, system and traffic design techniques used in wireless systems.

Course Learning Goals/Objectives: To gain a more in-depth understanding of effects introduced within radio channels and how they impact system performance.

Attendance Policy:

Drop Policy:

As per University guidelines. See the Registrar's Bulletin or the University Calendar in the front part of the UTA catalog for drop dates.

Tentative Lecture/Topic Schedule (Course Content) and Specific Course Requirements w/Descriptions:

Tentative Grade Computation: Homeworks (2 problem sets) @ 15% total
Miniprojects (2) @ 30% total
Project @ 15%
Exams (2) @ 20% each

Policies: Late homeworks, projects and not showing for exams is inexcusable with out approval of instructor prior to due date or exam date.

Jan.	14	Introduction to the radio channel
"	16	Channel behavioral characterization
"	21	Radio channel modeling

"	23	Basic terrain effects		
"	28	"	"	"
"	30	"	"	"
Feb.	4	No Class		
"	6	Atmospheric effects		
"	11	"	"	"
"	13	"	"	"
"	18	Toward a composite model of terrain effects		
"	20	"	"	"
"	25	Effects of man-made structures		
"	27	Microcells and physical modeling of urban and suburban areas		
Mar.	4	"	"	"
"	6	Exam 1		
"	11	Spring Break		
"	13	Spring Break		
"	18	Microcells, picocells and indoor environments		
"	20	Multipath phenomena		
"	25	"	"	"
"	27	Wideband channel characterization		
Apr.	1	"	"	"
"	3	Man-made noise and interference		
"	8	Diversity approaches to channel compensation		
"	10	"	"	"
"	15	Other types of channel compensation		
"	17	"	"	"
"	22	Channel sounding and simulation		
"	24	Coverage and quality of service issues		
"	29	Modeling and survey tools		
May	1	Review		

Final Exam: Thursday May 8 8- 10:30 am

If you require an accommodation based on disability, I would like to meet with you in the privacy of my office, during the first week of the semester, to make sure you are properly accommodated.

Student Evaluation of Teaching

Students will be asked to complete instructor/course evaluation forms at the end of the semester.

Americans with Disabilities Act:

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112—The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act – (ADA), pursuant to section 504 of The Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide “**reasonable accommodation**” to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with **informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.**

Academic Dishonesty

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic

dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

“Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents’ Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22).

ANY CHEATING WILL RESULT IN SEVERE PENALTIES.