University of North Texas at Dallas Spring 2015 SYLLABUS

CSCE 3510 – Wireless Communications 3Hrs					
Department of	Mathematics and Information Technology	Division of	Liberal Arts and Science		
Instructor Name:	Nassim Sohaee				
Office Location:	DAL2 - 230				
Office Phone:	972-338-1573				
Email Address:	Nassim.sohaee@untdallas.edu				
Office Hours:	Monday 12:00 noon – 2:30 PM Tuesday 9:30 AM – 2:30 PM Wednesday 1:00 PM – 2:30 PM				
Virtual Office Hours:					
Classroom Location:	100% online				
Class Meeting Days & Times:	All the course material will be available on Black Board Learn				
Course Catalog Description:	Fundamentals of wireless communications and networking, with emphasis on first, second, and third generation cellular systems and satellite communication. Topics include point-to-point signal transmission through a wireless channel, cellular capacity, multi-user transmissions, and mobility management.				
Prerequisites:	CSCE 2610 or CSCE 261	5			
Co-requisites:					
Required Text:	Title Guide to Wireless C Author Jorge Olenewa ISBN 978-1-111-30731-8				
Recommended Text and References:					
Access to Learning	UNT Dallas Library:				
Resources:	phone: (972) 780-36; web: http://www.unt.e	25; edu/unt-dallas/library.h	<u>ntm</u>		
	phone: (972) 780-36 e-mail: 1012mgr@fh				

Course Goals or Overview:

The purpose of this course is to provide a broad survey of wireless communications including in-depth coverage of protocols, transmission methods, and IEEE 802.11 standards. Many hands-on exercises are included, which allow students to practice skills as they are learned.

Learning Objectives/Outcomes: At the end of this course, the student will

- Introduction to Wireless Communications
- Wireless Data Transmission
- Understanding Radio Frequency Communications
- How Antennas Work
- Wireless Personal Area Networks
- High-Rate Wireless Personal Area Networks

- Low-Speed Wireless Local Area Networks
- High-Speed WLANs and WLAN Security
- Wireless Metropolitan Area Networks
- Wireless Wide Area Networks
- Radio Frequency Identification and Near-Field Communication

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by email.

Week	Topics	Chapter Reading	Assignments
1	Course Introduction		
2	Introduction to Wireless Communications	Chapter 1	Discussion Board / weekly Quiz
3	Wireless Data Transmission	Chapter 2	Discussion Board / weekly Quiz
4	Understanding Radio Frequency Communications	Chapter 3	Discussion Board / weekly Quiz
5	How Antennas Work	Chapter 4	Discussion Board / weekly Quiz
6	Wireless Personal Area Networks	Chapter 5	Discussion Board / weekly Quiz
7	High Rate Wireless Personal Area Networks	Chapter 6	Discussion Board / weekly Quiz
8	Low-Speed Wireless Local Area Networks	Chapter 7	Discussion Board / weekly Quiz
9	Spring Break		
10	High-Speed WLANs and WLAN Security	Chapter 8	Discussion Board / weekly Quiz
11	Wireless Metropolitan Area Networks	Chapter 9	Discussion Board / weekly Quiz
12	Wireless Wide Area Networks	Chapter 10	Discussion Board / weekly Quiz
13	Radio Frequency Identification and Near-Field Communication	Chapter 11	Discussion Board / weekly Quiz
14	Wireless Communications in Business	Chapter 12	Discussion Board / weekly Quiz
15	Review		
16	Final Exam week		Comprehensive Final Exam

Course Evaluation Methods

Weekly quizzes	15 points each	180
Discussion Boards	5 points each	60
Final Exam		60
Total		300

Grade Determination

A = 270 - 300 pts, 90% or better

B = 240 - 269 pts, 80 - 89%

C = 210 - 239 pts, 70 - 79%

D = 180 - 209 pts, 60 - 69%

F = 179 pts or bellow, i.e. less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.unt.edu/unt-

<u>dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf</u> for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.