FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL[1]

DEPARTMENT: CEECS	COLLEGE: ENGINEERING AND COMPUTER SCIENCE

RECOMMENDED COURSE IDENTIFICATION:

PREFIX _____CNT_____ COURSE NUMBER ___6106___ LAB CODE (L or C) _____

(TO OBTAIN A COURSE NUMBER, CONTACT MJENNING@FAU.EDU)

COMPLETE COURSE TITLE: VEHICULAR NETWORKS

EFFECTIVE DATE (first term course will be offered) ~~OFFERED FOUR TIMES A YEAR OR SPECIAL TOPICS OR WILL BE SCHEDULED~~ (Fall 2014)

CREDITS[2]: 3

TEXTBOOK INFORMATION:
VEHICULAR NETWORKS FROM THEORY TO PRACTICE, OLARIU, STEPHAN (EDITOR) AND WEIGLE, MICHELE C. (EDITOR), CHAPMAN & HALL/CRC PRESS 2008, ISBN: 1420085883

GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR ___X___ SATISFACTORY/UNSATISFACTORY _____

COURSE DESCRIPTION, NO MORE THAN THREE LINES:
A STUDY OF VEHICULAR AD HOC NETWORKS ROUTING AND MAC PROTOCOLS, BROADCAST PROTOCOLS, APPLICATIONS, AND PERFORMANCE MODELING.

PREREQUISITES *:	COREQUISITES*: N/A	REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)*:
CNT 4104 INTRODUCTION TO DATA COMMUNICATIONS OR AN EQUIVALENT NETWORKING COURSE		GRADUATES IN COMPUTER ENGINEERING, COMPUTER SCIENCE, AND ELECTRICAL ENGINEERING.

* PREREQUISITES, COREQUISITES AND REGISTRATION CONTROLS WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE: PH.D.

Faculty contact, email and complete phone number: Imad Mahgoub – mahgoubi@fau.edu – 561-297-3458	Please consult and list departments that might be affected by the new course and attach comments.[3] N/A

Approved by:	*Date:*	1. **Syllabus** must be attached; see guidelines for requirements: *www.fau.edu/provost/files/course syllabus.2011.pdf*
Department Chair: *Nurgun Erdol*	11/27/13	
College Curriculum Chair:	11/27/13	
College Dean:	12/2/hw'z	2. Review **Provost Memorandum:** **Definition of a Credit Hour** *www.fau.edu/provost/files/Definition Credit_Hour_Memo_2012.pdf*
UGPC Chair:	1/24/14	
Graduate College Dean:	1-29-14	
UFS President:		3. **Consent** from affected departments (attach if necessary)
Provost:		

Email this form and syllabus to *UGPC@fau.edu* **one week before** the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

1. Course title/number, number of credit hours	
Vehicular Networks – CNT ~~6XXX~~ 6106	3 credit hours

2. Course prerequisites and corequisites
Prerequisites: CNT 4104 Introduction to Data Communications or an equivalent networking course
Corequisites: N/A

3. Course logistics
Term:
This is a classroom lecture course. It is research-oriented
Class location and time: TBD

4. Instructor contact information	
Instructor's name
Office address
Office Hours
Contact telephone number
Email address	Dr. I. Mahgoub, Professor
Engineering East Bldg., Room 421
TBD
561-297-3458
mahgoubi@fau.edu

5. TA contact information
N/A

6. Course description
A study of vehicular networks routing and MAC protocols, broadcast protocols, applications, and performance modeling.

7. Course objectives/student learning outcomes
To develop an understanding of the basic concepts of vehicular networks and their communications protocols and to examine the technical challenges encountered in the deployment of these networks.

8. Course evaluation method
Test1   30%
Test2   35%
Project   35%

9. Course grading scale
Grading Scale:
90 and above: "A", 87-89: "A-", 83-86: "B+", 80-82: "B", 77-79 : "B-", 73-76: "C+", 70-72: "C", 67-69: "C-", 63-66: "D+", 60-62: "D", 51-59: "D-", 50 and below: "F."

10. Policy on makeup tests, late work, and incompletes
Makeup tests are given only if there is solid evidence of a medical or otherwise serious emergency that prevented the student from participating in the exam. Makeup exam should be administered and proctored by department personnel unless there are other pre-approved arrangements *Late work* is not acceptable. *A grade of incomplete* will be assigned only in the case of solid evidence of medical or otherwise serious emergency situation.
11. Special course requirements
None
12. Classroom etiquette policy
University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions.
13. Disability policy statement
In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton campus, SU 133 (561) 297-3880 and follow all OSD procedures. *URL to be added.*
14. Honor code policy
Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf
15. Required texts/reading
Vehicular Networks from Theory to Practice, Olariu, Stephan (Editor) and Weigle, Michele C. (Editor), Chapman & Hall/CRC Press 2008, ISBN: 1420085883
16. Supplementary/recommended readings
The textbook is supplemented by research articles posted on Blackboard under course Content.

**Department of Computer & Electrical Engineering
and Computer Science
Florida Atlantic University
Course Syllabus**

17. Course topical outline, including dates for exams/quizzes, papers, completion of reading		
Lecture Topics	Approximate # of 1.5 hr. Lectures	
1. Introduction	2	
2. WAVE Standard	3	
3. Vehicle Localization	1	
4. Routing protocols	3	
5. Broadcast protocols	3	
6. Geo-cast protocols	1	
7. Aggregation	2	
8. MAC protocols	2	
9. Scalability issues	2	
10. Privacy and security issues	3	
11. Performance modeling	3	
12. Applications	3	
13. Tests	2	
Exam Dates: TBD		