EEL 6588 – WIRELESS AD HOC NETWORKS

1. **Catalog Description** – Advanced research-oriented course covering various topics relevant to a cutting-edge technology, namely wireless ad hoc networks, mobile ad hoc networks, wireless sensor networks and/or wireless mesh networks.
   (3 credit hours)

2. **Pre-requisites and Co-requisites** EEL5718, graduate student standing

3. **Course Objectives** The primary focus of this course is on various aspects of wireless ad hoc and sensor network design. Topics on applications, technology, design, medium access, topology, addressing and routing will be discussed.

4. **Contribution of course to meeting the professional component**
   3 credits of Engineering Science

5. **Relationship of course to program outcomes:**
   This course incorporates the following MS, ME, and PhD student learning outcomes:
   Knowledge:
   Ability to identify, formulate and solve engineering problems
   Ability to critically read and integrate engineering research literature
   Skills:
   Ability to use applied mathematical and/or modern experimental techniques
   Ability to use modern engineering tools for practice at an advance level
   Professional experience:
   Ability to communicate effectively

6. **Instructor** – Dr. Janise McNair
   a. Office Location: NEB 429
   b. Telephone: 392-2629
   c. E-mail address -- mcnair@ece.ufl.edu
   d. Web site – www.wam.ece.ufl.edu/eel6588.html
   e. Office hours – Tues, Thurs 1030am-1130am

7. **Teaching Assistant** – N.A.
   a. Office location
   b. Telephone
   c. E-mail address
   d. Office hours

8. **Meeting Times** – T 2nd -3rd periods, R 3rd period

9. **Class/laboratory schedule:** 3 sessions per week, 50-minute sessions

10. **Meeting Location:** MAE-A 327

11. **Material and Supply Fees** -- none
12. **Textbooks and Software Required**
a. Title – Wireless Sensor Networks  
b. Author – Ian F. Akyildiz and Mehmet Can Vuran  
c. Publication date and edition – 2010  
d. ISBN number: 9780470036013  

13. **Recommended Reading:**
Holger Karl, Andreas Wilig  
ISBN: 9780470519233  

14. **Course Outline** (provide topics covered by week or by class period)

   a. Introduction/Admin – 1 period  
   b. Applications, Components, and Devices – 13 periods  
   c. Architectures and Topology – 12 periods  
   d. Medium Access – 12 periods  
   e. Networking – 12 periods  

15. **Attendance and Expectations**
Class attendance is required. A class participation grade will be assessed, based on class participation during group presentations.  

16. **Grading** – Two midterm exams (25% each), One Project (30%), Group Presentations (20%)  

17. **Grading Scale** – In order to graduate, graduate students must have an overall GPA and an upper-division GPA of 3.0 or better (B or better). Note: a B- average is equivalent to a GPA of 2.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: [http://gradschool.ufl.edu/catalog/current-catalog/catalog-general-regulations.html#grades](http://gradschool.ufl.edu/catalog/current-catalog/catalog-general-regulations.html#grades)  

18. **Make-up Exam Policy**
There will be no make-up exams, except for rare, unavoidable cases (as determined by the instructor), for which the student has provided verifiable documentation.  

19. **Honesty Policy** – All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.
20. **Accommodation for Students with Disabilities** – Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

21. **UF Counseling Services** – Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
   - UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
   - Career Resource Center, Reitz Union, 392-1601, career and job search services.

22. **Software Use** – All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.