

**SPRING 2010 : ELEC 3800 Sec. 002 : Random Signals and Systems**  
T Th 11:00 AM – 12:15 PM Broun 306

**Instructor:** Prof. J.K. Tugnait 313 Broun, 4-1846, tugnajk@eng.auburn.edu  
Office Hours: MWF 10:00 – 11:30 AM; 2:00 – 3:00 PM;  
e-mail for appointment at other times.

**Textbook:** G. R. Cooper and C. D. McGillem, *Probabilistic Methods Of Signal And System Analysis*, 3rd Ed., Oxford Univ. Press, 1999.

**Ref.:** A.H. Haddad, *Probabilistic Systems and Random Signals*.  
Pearson Prentice-Hall, 2006.

**Web Site:** <http://www.eng.auburn.edu/users/tugnajk/>  
All posted notes are in “microsoft windows journal file” format.

**Grading Basis:**

Quizzes :	20%	
Test I :	25%	( Feb. 23, 2010 )
Test II :	25%	( April 20, 2010 )
Final :	30%	( May 5, 2010, Wed. 12:00 noon )

**Attendance Policy:** *Class attendance and participation is required. Unexcused absences from more than 3 class sessions will receive an F in the course.* For an absence to be excused, the student must present an official excuse obtained from the Engineering Student Services Office in 104 Ramsay no later than 1 week after the absence. For more information, see the Academic regulations in the Tiger Cub.

**Homework:** will be assigned periodically, but will not be collected. Solutions to the homework problems will be discussed in class.

**Quiz Policy:** Typically a quiz will be on material covered in the most recent homework assignment. There may be unannounced (pop) quizzes. The lowest quiz grade will be dropped from your average. **No “make-up” quizzes will be given for any absences.**

**TEXT COVERAGE**

CHAPTER	SECTIONS	# of classes
1	1-1 – 1-10	5
2	2-1 – 2-9	5
3	3-1 – 3-4	3
5,6	5-1 – 5-5, 6-1,2,3,5	4
4	4-1 – 4-5	4
7	7-1,2,3,5,6,7	3
8	8-1,2,3,4,7,8	3

**ELEC 3800. Random Signals and Systems (3).** (3) Lec. 3. Pr., ELEC 2120. Analysis of random signals and noise, system reliability, responses of linear systems to random inputs, optimal filter design.