ĀỊM | TEXAS A&M
U N I V E R S I T Y   SYLLABUS

Course title and number	**ECEN 303: Random Signals and Systems** **Section 501**
Term	Summer 2016 Brazil
Meeting times and location	M T W Th 9:00 – 11:00 UPE/POLI Credit: 3

Course Description and Prerequisites

Concepts of probability and random variables necessary for the study of signals and systems involving uncertainty; applications to elementary problems in detection, signal processing and communication.
Course Prerequisites: : MATH 308 Differential Equations and junior or senior classification.

Learning Outcomes or Course Objectives

The learning outcomes include the following ABET Criteria (A, E, and K):
 - an ability to apply knowledge of mathematics, science, and engineering
 - an ability to identify, formulate, and solve engineering problems
 - an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Instructor Information

Name	Prof. Ulisses Braga-Neto, ECE Department
Telephone	TBA
Email address	ulisses@ece.tamu.edu
Office hours	Online via PIAZZA 24x7, in person by appointment
Office location	TBA

Textbook and/or Resource Material

Textbook: A First Course in Probability by Sheldon Ross, Pearson, 9th Edition.
                 13 digit ISBN: 978-0321794772

Piazza.com
We will be using Piazza as a discussion board for the class. Part of your class participation grade will be based on the number of posts / contributions you make.

Find our class page at: https://piazza.com/tamu/summer2016/ecen303501

Grading Policies

Grading will be based on homework and quizzes. Reading assignments will not be made; you are expected to study the book topics as appropriate. The dates indicated for the material are approximate; some modifications will be inevitable.

Quizzes:	50%	
Homework:	40%	
Class Participation:	10%	Class attendance, participation, PIAZZA
	100%	

Grading Scale (out of 100): A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: 59 or lower

Homework

Homework will be assigned weekly and graded. Solutions will be provided. The quizzes will be mostly based on problems that will be assigned as homework.

Course Topics, Calendar of Activities, Major Assignment Dates

Week	Topic (tentative, subject to change)
1. Week of Jul 4	Introduction & Mathematical Review; Basic Concepts of Probability; Equiprobable Outcomes and Combinatorics.
2. Week of Jul 11	Conditional Probability; Discrete Random Variables
3. Week of Jul 18	Discrete Expectations; Discrete Random Vectors
4. Week of Jul 25	Continuous Random Variables; Functions and Derived Distributions
5. Week of Aug 1	General Expectation and Bounds; Empirical Distributions

Academic Integrity
For additional information please visit: http://www.tamu.edu/aggiehonor

"An Aggie does not lie, cheat, or steal, or tolerate those who do."
The handouts used in this course are copyrighted. The definition of "handouts" is all materials generated for this class, which include but are not limited to syllabi, homework assignments, in-class materials, and additional printed materials except published scientific papers for personal use. Because these materials are copyrighted, **you do not have the right to make additional copies of the handouts unless the instructor of this course expressly grants permission.** As commonly defined, plagiarism consists of passing off the ideas, words, writings, etc., of another as one's own. In accordance with this definition, you are committing plagiarism if you copy the work of another person without proper citation and acknowledgement, and turn it in as your own, even if you should have the permission of that person. **Plagiarism** is one of the worst academic offenses, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. **Paraphrasing** without proper citation and acknowledgement is one form of plagiarism. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty". Any forms of dishonesty including, but not limited to, cheating on any examinations and plagiarism will be handled according to

the procedures outlined by the Aggie Honor System Office. Please check the following websites for further information:

University Regulations Student Handbook: http://student-rules.tamu.edu
Definition of Academic Misconducts: http://www.tamu.edu/aggiehonor/acadmisconduct.htm

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu