

Purdue University
ECE302: Probabilistic Methods in Electrical and
Computer Engineering
Division II, Spring 2013

General Information

Instructor: Prof. Mimi Boutin, mboutin at purdue dot you know what, MSEE 342, 494-3538.

Instructor's Open Office Hours: Tuesday 9-11am.

Brown Bag Lunch with Instructor: MWF 1:30-2:30 in the MSEE Atrium.

Teaching Assistant: Wei-Kang Hsu

Class time / location: MWF 12:30-13:20 MSEE-B012

Course Wiki: https://www.projectrhea.org/rhea/index.php/2013_Spring_ECE_302_Boutin

Textbook: A. Leon-Garcia, Probability Statistics and Random Processes for Electrical Engineering, Third Edition, Prentice Hall.

Course Objectives

This course introduces the concepts of probability and random processes with a view towards application to engineering problems.

Work expectation

For every lecture, an average student should expect to spend, on average, about 50 minutes on class-related reading and about 50 minutes working out problems.

Grade

Homework	10%	No late hw accepted.
Quizzes	10%	No make up.
2 Intra-semester exams	20% each	No make up.
Final	40%	(raised to 50% if one exam missed)

Class Attendance Policy

Students are expected to attend every lecture. However, it is recognized that, **very occasionally**, it may be necessary for a student to be absent from class for personal reasons beyond his/her control (e.g., illness, family emergency, bereavement, etc.). We trust students to use their best judgement in such circumstances and thus require no documentation or justification for missing class.

- **How can I make up the points if I miss a quiz or do not hand in my homework for a valid reason?** There will be various bonus point opportunities throughout the semester. These will allow students

However, please note that Rhea is a public website: if you wish to contribute to the wiki anonymously, please contact your instructor to get a different login.

Academic Honesty

- **Looking around is strictly forbidden during exams.**
- Electronic devices (e.g., calculators, cell phones, PDAs) must be **turned off** and **out of reach** (e.g., in a zipped backpack) during exams. Do not keep your cell phone in your pocket! Do not put your cell phone on vibrate only mode!
- When the exam time is over and the proctor announces that time is up, you **must stop writing**. The exam of any student who is caught writing after time is up will receive a grade of zero. Similarly, if you open the exam before the "begin signal" has been given (even if you do not write anything), you will receive a grade of zero.
- We keep a copy of all graded exams in order to compare them with any exam brought in for a grade revision. Any student who alters his/her exam post grading and asks for a grade revision **will be caught** and will suffer severe disciplinary actions.

ABET Outcomes

Students will have an ability to solve simple probability problems in electrical and computer engineering applications [1,2,4,a,b,e]. Students will be able to model complex families of signals by means of random processes [1,2,3,4,a,b,e,k]. Students will be able to determine the random process model for the output of a linear system when the system and input random process models are known [1,3,4,a,b,e,k].