

[Home](#)
[Courses](#)
[MAP6932/6905-Probability and Imaging](#)

[MAP 4102 Probability and Stochastic Processes](#)

## MAP 4102 Probability and Stochastic Processes

### Course Content and Objectives

We will cover much of Chapters 2,3,4,5,6 and one of the Chapters 8,10 or 11 of the book :  
Introduction to Probability Models

11th Edition By Sheldon M. Ross.

This includes : Probability Spaces, Discrete and Continuous Random Variables, Conditional Probabilities, and Expectations, Standard Distributions, Poisson Processes, Discrete and continuous Parameter Markov Chains and either Queues, Brownian Motion or Simulation

### Instructor and Office Hours

Murali Rao, 494 Little Hall.MW: 4th period, F: 2nd period.

### Homework, Problems and Exams

Homework will be regularly assigned.

There will be three tests each of 33 points on 2/06, 3/20 and 4/20.

IMPORTANT: ALL TESTS ARE CUMULATIVE.

### Grading

Grading scale : A: 90 or above; A-: 87-89; B+: 84-86;  
B: 80-83; B-: 77-79; C+: 74-76; C: 70-73; C-: 67-69;  
D+ : 64-66; D: 60-63; E: < 60.

ABSOLUTELY NO MAKEUPS WITHOUT MEDICAL DOCUMENTATION.  
NO REQUESTS FOR EXTRA CREDITS OR EXTRA ANYTHING.

NO BARGAINING FOR, OR CHANGING OF, GRADES OR POINTS.

Tentative weekly schedule:

1/05- 1/09 : Review of Basics: Probability Conditional Probability, Independence. Sections 1.1- 2.2.4

1/12 - 1/16 : Standard Distributions, Joint Distributions, Expectations. Sections 2.3.1- 2.3.4.

1/19 - 1/23 : Expectations Continued. Sections 2.4,1-2.4.3.

1/26 - 1/30 : Joint Distributions, Independence, Variance and Covariance. Sections 2.5.1-2.5.4.

2/02-2/06 :Moment Generating Functions. Sections 2.6- 2.9.

2/09-2/13: Conditional Probability and Expectation. 3.1- 3.7.3.

2/16-2/20 : Markov Chains. Sections 4.1- 4.4.1.

2/23-2/27 : Continued. Sections 4.6-4.8.

3/09-3/13: Continued. Sections 4.9- 4.11.

3/16-3/20: Exponential Distribution and The Poisson Process. Sections 5.1- 5.3.3.

3/23-3/27 : Poisson Process Continued. Sections 5.3.4- 5.3.6.

3/30-4/03 : Generalizations of the Poisson Process. Sections 5.4.1-5.5.

4/06-4/20 : Continuous Parameter Markov Chains, Queueing Theory, Brownian Motion or Simulation. Chapters 6, 8, 10 or 11.

**Teaching Evaluation:**Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>.

**Academic Honesty:**The course will be conducted in accordance with the University honor code and academic honesty policy, which can be found in the [student guide](#)

**Accommodation for Student with Disabilities:** Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

» [Edit this article](#) | [Log out](#) »

### Course policies:

■ **Closed-book policy:** No use of calculators, or books will be allowed during any in-class tests/quizzes.

■ **Policy related to make-up exams or other work:** There will be no opportunities to make up for work not submitted. However, if a student provides a legitimate excuse well in advance, scores will be prorated. Work with due date should be turned in at the beginning of class on the stated due date. Late work will not be accepted and will be deemed work not submitted.

■ **Policy on class attendance:** Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

■ **University's honesty policy:** UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code". On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

■ **For students with disabilities:** Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

- **Students' evaluations of the course:** Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

