

SYLLABUS

STA 4321 Introduction to Probability
STA 5325 Fundamentals of Probability
Section 5520-Class Number 26489

Instructor: Malay Ghosh

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Office Hours: 1:00 p.m-3:00 p.m. M and W. or by appointment via ZOOM.

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Office Hours: 12:00 Noon-1:00 p.m. T and Th. or by appointment

Objective:

The objective of the sequence STA 4321-4322 (rep. 5325-5328) is to provide students a solid foundation in mathematical statistics. STA 4321/5325 deals with the basic probabilistic and distributional tools that are needed for STA 4322/5328 which covers statistical inference. Besides, these tools are also useful for topics such as stochastic processes, time series analysis and others. We will cover the basic probability results, discrete and continuous distributions and multivariate distributions.

Text: Mathematical Statistics with Applications (7th Edition):

Authors: Wackerly, Mendenhall and Scheaffer

Course Website: Canvas

Please check this site regularly. Most course documents and important information including homework assignment and solutions, and other announcements will be posted there.

Prerequisite: MAC 2313 (or equivalent 3rd Semester Calculus Course). An introductory statistics course such as STA 2023 or STA 3032 will help.

I am planning to give 10 homeworks (unless not possible due to extraneous circumstances). I will not be collecting the homeworks as such. But there will be a quiz every week (except in the exam weeks) based exclusively on these homeworks. Once the quiz is over, solutions for all the homeworks covering the quiz material will be posted. There will also be three exams. The exams will be non-cumulative.

The weights attached to each exam is 25 per cent. Quizzes will carry 20 per cent weight. Attendance and class participation will carry 5 per cent weight.

A non-graphing calculator can be used for the exams and quizzes. You will be permitted to bring one 8.5 by 11 inch sheet of paper with formulas and notes on both sides for each exam. No make up exams will be offered except under unusual circumstances, for example illness, and that too with prior permission from the instructor.

The grading policy is 90%+ for A; 85-89% for A-; 80-84% for B+; 75-79% for B; 70-74% for B- and so on. All grades are final and non-negotiable.

Homework Policy: I will be in constant co-ordination with the Teaching Assistant to make sure that the scores are fair. Once we have decided about the scores, it is very unlikely that there will any change unless we both have missed any valid point.

Dates:

Quiz 1: September 2
Quiz 2: September 9
Quiz 3: September 16
Quiz 4: September 23
EXAM I: September 30
QUIZ 5: October 7
QUIZ 6: October 14
QUIZ 7: October 21
QUIZ 8: October 28
EXAM 2: November 4
QUIZ 9: November 13
QUIZ 10: November 20
EXAM 3: December 2

Homework List:

Chapter 2: 2.1, 2.7, 2.8, 2.11, 2.13, 2.15, 2.17, 2.19, 2.28, 2.31, 2.33, 2.38, 2.40, 2.43, 2.49, 2.51, 2.53, 2.63, 2.72, 2.73, 2.76, 2.79, 2.80, 2.88, 2.94, 2.95, 2.97, 2.98, 2.101, 2.110, 2.112, 2.114, 2.116, 2.120, 2.124, 2.125, 2.130, 2.133, 2.135.

Chapter 3: 3.1, 3.3, 3.4, 3.8, 3.11, 3.12, 3.14, 3.20, 3.25, 3.27, 3.31, 3.34, 3.37, 3.39, 3.41, 3.45, 3.48, 3.53, 3.61, 3.69, 3.70, 3.71, 3.79, 3.90, 3.92, 3.103, 3.107, 3.113, 3.117, 3.122, 3.127, 3.130, 3.132, 3.139, 3.153, 3.155, 3.158, 3.167, 3.169.

Chapter 4: 4.8, 4.11, 4.13, 4.15, 4.18, 4.19, 4.22, 4.27, 4.30, 4.31, 4.33, 4.38, 4.39, 4.40, 4.47, 4.51, 4.64, 4.66, 4.74, 4.80, 4.91, 4.95, 4.104, 4.109, 4.124, 4.126, 4.129, 4.131, 4.136, 4.137, 4.139, 4.145, 4.146, 4.149, 4.153.

Chapter 5: 5.1, 5.3, 5.5, 5.8, 5.10, 5.15, 5.17, 5.18, 5.19, 5.21, 5.23, 5.26, 5.33, 5.37, 5.38, 5.45, 5.47, 5.50, 5.52, 5.59, 5.61, 5.69, 5.72, 5.73, 5.76, 5.81, 5.89, 5.90, 5.94, 5.100, 5.102, 5.104, 5.105, 5.108, 5.113, 5.120, 5.123, 5.125, 5.137, 5.139, 5.141.

Help: Do not hesitate to get in touch with the instructor or the TA if you are experiencing problems, need help, or have questions or other course related questions. You can contact any one of the two by sending an e-mail or by coming at office hours.

Lecture Attendance: Classroom lecture attendance is fully expected, even if not strictly enforced. You are responsible for learning all material presented during lecture, and any topic covered is a potential exam topic (unless otherwise stated).

Reasonable Accommodations: To request classroom accommodation, please be certain that you have made all necessary arrangements with the Dean of Students Office, and obtain from them documentation to submit to the instructor at the time of your request. A request must be made to the instructor at least one week in advance of the date for which the accommodation is requested. This course information and policies sheet can be made available in alternative formats to accommodate print-related disabilities. Contact the instructor for more information.

Academic Integrity: Guidelines outlined in your University of Florida Student Guide at <http://www.dso.ufl.edu/sccr/honorcode.php>.