

STA 5326 Distribution Theory and Inference

AUGUST 30, FALL 2011

Days/Time/Room: TR 11:00 AM - 12:15 PM OSB 108

Instructor: Prof. Dr. Dr. Vic Patrangenaru

Office: 208 OSB

E-mail: vic@stat.fsu.edu

Office hours: TR 9:30 AM - 10:45 AM

Texts: 1. Online Notes at www.stat.fsu.edu/~vic. More details will be given in class.

2. Statistical Inference, Second Edition, by George Casella and Roger Berger. ISBN: 0534243126. Some errors in this text will be discussed in the Online Notes.

Teaching Assistant: Mr. David Lee

Prerequisite: MAC 2313; at least one previous course in Statistics or Probability.

Course description: This course is designed to give students both an rigorous and logical account for basic Probability needed for Statistics, and for Point Estimation. Upon completion of the course students should master concepts such as probability space, counting principles, conditional probability, Bayes rule, independence, distributions of random variables, joint, marginal and conditional distributions of multivariate random vectors, expectations, sampling distributions, limiting distributions, the Central Limit Theorem, Elements of Nonparametric Estimation. The chapters from the textbook or partially covered are :

- Chapter 1 Probability Theory
- Chapter 2 Transformations and Expectations
- Chapter 3 Common Families of Distributions

- Chapter 4 Multiple Random Variables
- Chapter 5 Properties of a Random Sample

For Nonparametric Estimation, the Inference part of this class, Online Lecture Notes will be provided.

Attendance policy: Active attendance adds up to 5 bonus points. If you miss classes without a formal excuse, the extracredit is lost.

October 14th is the very last day to withdraw from your class without receiving a grade, the last day to withdraw from school without receiving a grade, and the last day to have an individual student's grading scheme changed to the satisfactory,unsatisfactory scale, "S/U".

Grading: The course grade will be calculated on the basis of hw or quizzes (20%) two midterm exams (20% each) and a final exam(40%). The date of the tests will be announced in class. There will be no make ups. Quizzes and assigned homework will be discussed in class or at office hours.

Disclaimer: This syllabus provides a general plan; deviations may be necessary.