STA 4322/5328 Introduction to Statistics Theory
Fall 2016

Instructor Hani Doss, 222 Griffin-Floyd; Office Hours: MWF 4th period (10:40-11:30 am) (if you come to see me, please do so before 11:15), or by appointment; Phone: 273-2991 ; email: `dossøst at. ufi. e du` (do not ask questions regarding the course material by email)

Teaching Assistant Runmin Shi (`srmO9270uf 1. edu`)—117D Griffin-Floyd; Office Hours: Tuesday 9th period, Thursday 8th period.

Course Description This is a calculus-based course which gives a theoretical foundation for fundamental methods in statistical inference. It covers point estimation, confidence intervals, and hypothesis testing for models based on standard parametric families. The course is designed to prepare the students for graduate-level work in statistics and related fields. This is fundamentally a theory course, not a course in applied statistics.

Grading Your final course grade will be based on the four components below, with the stated weights:

Exam 1:   Wednesday September 28, 8:20 pm, room TBA; covers everything up
             to and including lecture of Wed September 28. Note evening time slot. 25%

Exam 2:   Friday November 4, 8:20 pm, room TBA; covers everything up to
             and including lecture of Wednesday November 2 (with emphasis on
             material covered after Exam 1). Note evening time slot.   25%

Final: Wednesday December 14, 3:00-5:00 pm. Comprehensive, but with
             emphasis on material covered after Exam 2).   34%

Homework: There will be 8-10 homeworks assigned during the semester.   16%

Note the dates and times of the three exams. You should clear your schedule now so that you do not have a conflict with these time slots.

A course average of 93-100 will guarantee an A, 90-92 at least an A-, 87-89 at least a B+, 83-86 at least a B, 80-82 at least a B–, etc. (The tests will be hard, and the actual cutoffs for the grades are very likely to be lower than these numbers.)

Prerequisites Prerequisites are:

• STA 4321 (Introduction to Probability)

• MAC 2311, 2312, 2313 (Calculus I, II, III)

If you have not taken all of these (or their equivalents), you may not register for this course.

Course Web Page `http : / / www .stat.ufl.edu/~doss/Courses/sta4322`

A password is needed to enter the Homeworks page; the password will be given out in class.

Text *Mathematical Statistics with Applications* by Wackerly, Mendenhall, and Scheaffer (7th edition, 2008).

This book is recommended, not required. We will not follow it closely. Some problems from the book will be assigned for homework, but otherwise, we will not use it.

Coverage Roughly, we will cover the material in Chapters 7-10 of the text (however, the level of this course is higher than that of the book, so there is no real correspondence between what we cover and these chapters). *Note that there will be material covered in lectures which is not found anywhere at all in the textbook, and you will be responsible for that material.*

Course Policies Homework must be turned in at the beginning of the lecture on the due date. Late homework will not be accepted. All work must be entirely your own.

All exams are closed-book, closed-notes; however, you may bring one 8.5 x 11 sheet of notes to the exams (you can write on both sides of the sheet). You should bring a calculator to the tests. Makeup exams must be approved before the time of the exam and will be given only in case of medical or family emergencies (which must be appropriately documented).

You are responsible for everything from lecture. Do not depend on the course web page for announcements regarding due dates for homeworks, changes in schedules, etc.

I am going to use the projector, and distribute hard copies of the slides (electronic versions of the slides will *not* be available). The hard copies will be distributed once. I am not going to bring slides from the previous lecture for the benefit of those who didn't come to class. The notes that are passed out will be a skeleton of the lectures (in other words, they are going to be incomplete) with the missing material developed during the lecture. Therefore, skipping class and getting a copy of the notes is not going to work.

Cell phones should be turned off (or set on silent). Laptops must be shut.

If you feel you need special arrangements because of a disability please see me.