

Syllabus

USC, Department of Statistics, Spring 2020

STAT 823: Large Sample Theory

Class Time: T/TH 01:15 pm–02:30 pm (Jan. 13 – Apr. 27, 2020)

Class Place: LeConte College 201A

Prerequisite: STAT 713

Instructor: Dewei Wang

Office: LeConte 219B

Email: deweiwang@stat.sc.edu

Office Hours: T/TH 10:30 am–11:30 am in my office

Textbook: Boos, D. and Stefanski, L. (2013). Essential Statistical Inference, Theory and Methods
Lehmann, E. (1999). Elements of Large Sample Theory.

Objectives: The purpose of this course is to introduce you to important concepts in asymptotic (large-sample) theory. Our approach will be more “causal,” but understanding and writing detailed arguments will be vital. A mastery of the material from STAT 712–713 is assumed.

Course Overview: We will cover the basics of the large sample theory and asymptotics of likelihood-based inferential statistics and M-estimators.

Homework: Homework will be assigned on a regular basis. Each student must write up his/her solutions independently of others.

Exam Schedule: There will be either a final examination on Thursday, May 5, at 12:30 pm or a final take-home project (due time and rules will be informed in class).

Grade Breakdown: Your course grade will be determined by your performance on homework (60 percent) and the final examination/project (40 percent). Final course grades will be assigned according to a 90(A)–85(B+)–80(B)–75(C+)–70(C)–65(D+)–60(D)–(F) protocol.

Academic Integrity:

Students are expected to follow the University of South Carolina Honor Code and should expect that every instance of a suspected violation will be reported. Students found responsible for violations of the Code will be subject to academic penalties under the Code in addition to whatever disciplinary sanctions are applied. Cheating on an exam or copying someone else’s work, will result in a 0 for the work, possibly a grade of F in the course, and, in accordance with University policy, be referred to the University Committee for Academic Responsibility and may result in expulsion from the University.

Expectations for Classroom Behavior:

All cell phones are to be turned off or silenced during class (not on vibrate). All cell phones are to be put away out of view during class; there is no text messaging, web browsing, etc., during class. Please be respectful of each other, the instructor, and any guest while in class. We are all here to learn! Any disrespectful or disruptive behavior may result in your referral to the Office of Student Judicial Programs.

Accommodating Disabilities:

If anyone with a disability needs special attention with examinations or other aspects of the course, please talk to me no later than Thursday, Jan. 23, 2020.

Note that reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, contact the Office of Student Disability Services: 777-6142, email sasds@mailbox.sc.edu, or stop by LeConte College Room 112A. All accommodations must be approved through the Office of Student Disability Services.