

STAT 513 Theory of Statistics I

MWF 9:05 - 9:55 PM

119 Thomas

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Textbook: *Statistical Inference, 2nd edition*, Casella & Berger.
Optional Text: *Basic Probability Theory*, Robert Ash.
Prerequisite: MATH 230 (and significant “mathematical maturity”)
Course Webpage: <http://johnfricks.org/teaching/stat513fall12013/>

Course Objective:

This course is the first in a two-sequence course for statistical theory at the level of beginning graduate students in the Department of Statistics. This course is designed to prepare graduate students from the Department of Statistics to take the qualifying exams at the end of the first year of course work. This is a challenging course in classical (i.e. not measure-theoretic) probability theory to provide the foundation for further studies in the theory of statistics.

Exam Schedule:

First Exam October 14
Second Exam November 18

Grading Policy: Grades will be determined by the following components:

Homework 15
Midterm 1 25
Midterm 2 25
Comprehensive Final 35

The final grades will be determined using the following intervals. If the grades are modified, a higher grade may be received, but you will not receive a lower grade than what is found below.

[93, 100] A
[90, 93) A-
[87, 90) B+
[83, 87) B
[80, 83) B-
[77, 80) C+
[70, 77) C
[60, 70) D
[0, 60) F

Homework:

- Homework will be given approximately weekly except for exam weeks.
- No late homework will be accepted under any conditions. Feel free to turn in the homework early or have a classmate turn it in if you are unable to attend class.
- Homework is due at the beginning of the class period.
- In order to receive credit for homework, all assignments must include HOW an answer is obtained, not just the solution.
- Feel free to discuss homework with your classmates—the work that you turn in MUST BE YOUR OWN.

Exam Policies:

- **Midterm Exams** These exams will be closed-book and closed-notes. They will be three hours in length and occur in the late afternoon.
- **Final Exam** The comprehensive final exam will take place at the registrar-designated time and place during the week of December 16-20. Like the midterms, it will be closed-book and closed-notes. It will cover the entire semester and not merely the period after the second midterm. No rescheduled final exams will be allowed except for those mandated by the Penn State registrar because of conflicts. This means that you must attend the final exam and should under no circumstances make end-of-semester travel arrangements before knowing your final exam schedule.

Integrity:

All Penn State University and Eberly College of Science policies regarding academic integrity apply to this course. Those policies are available at: www.science.psu.edu/academic/Integrity/index.html

Please pay particular attention to the student conduct section from those policies:

All course work by students will be done on an individual basis unless an instructor clearly states that an alternative is acceptable. Any reference materials used in the preparation of an assignment, whether quoted or paraphrased, must be explicitly cited. In an examination setting, unless the instructor gives explicit prior instructions to the contrary, regardless of whether the examination is in-class or take-home, violations of academic integrity shall consist of any attempt to receive assistance from any person or papers or electronic devices, or of any attempt to give assistance, whether the student doing so has completed his or her own work or not. Other violations include, but are not limited to, any attempt to gain an unfair advantage in regard to an examination, such as tampering with a graded exam or claiming another's work to be one's own.

Statement on Disability Services:

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site at <http://equity.psu.edu/ods/>. In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines at <http://equity.psu.edu/ods/guidelines/documentation-guidelines>). If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.