Stat 607: Mathematical Statistics I  
Fall 2017

**Instructor:** DAEYOUNG KIM  
Office Hours: Tuesday 2:00 PM – 3:30 PM,  
LGRT 1236  
Thursday 2:00 PM – 3:30 PM, or by appointment  
email: daeyoung@math.umass.edu

**Lecture:**  
Tuesday and Thursday 10:00AM - 11:15AM, LGRT 219

**Web Page:** Announcements regarding office hours, homework assignments, exams  
and solutions will be posted on http://www.math.umass.edu/~daeyoung/Stat607

**Required Text:** Statistical Inference (second edition), by George Casella and Roger L. Berger

**Prerequisites:** Multivariable calculus and linear algebra or permission of instructor.

**Course Description:** The first part of a two-semester graduate level sequence in probability  
and statistics, this course develops probability theory at an intermediate  
level (i.e., non measure-theoretic - Stat 605 is a course in measure-theoretic  
probability) and introduces the basic concepts of statistics.  
Topics include: general probability concepts; discrete probability;  
random variables (including special discrete and continuous distributions)  
and random vectors; independence; laws of large numbers;  
central limit theorem; statistical models and sampling distributions;  
and an introduction to point estimation, confidence intervals,  
and hypothesis testing.  
Statistical inference will be developed more fully in Stat 608.  
This course is also suitable for graduate students in a wide variety of  
disciplines and will give strong preparation for further courses in statistics,  
econometrics, and stochastic processes, time series, decision theory,  
operations research, etc. You will be expected to read sections of the text book  
in parallel with topics covered in lectures, since important part of graduate study  
is to learn how to study independently.

**Required Work:** The required work for the course will consist of homework assignments,  
a midterm and a final exam.

**Grading:** The final course grades will be based upon:  
Homework 35 %  
Midterm 30 % TBA  
Final (comprehensive) 35 % 12/19/2017 (10:30AM - 12:30PM)

**Homework:** Homework is due at the beginning of class on the due date.  
No late hw will be accepted, as the solutions of the assignments will be posted  
on the course website after each due date.  
Unreadable work, scratching out, etc. will not be graded.  
The homework can be discussed with your classmates
but you have to turn in your own homework. Your work will be evaluated on the method of solution and the ability to apply concepts, rather than the numeric answer to the problem.

Exam: For both the midterm and final exams, you are allowed to bring one, 8.5x11(letter size) double-sided formula sheet. You are responsible for taking the final exam at the time it is scheduled by the University. Do not make travel plans that may conflict with the final date before knowing when the exam is scheduled for.

Course Policies:
1. If you have a University-approved conflict with any of the exams, you must let me know at least one week before the exam. A conflict exam will be scheduled to take place just before or just after the regularly scheduled exam.

2. Make-up exams will only be given for legitimate, documented reasons (e.g., serious illness, injury, or death in the family) and with approval before the exam occurs.

3. Attendance to each class meeting is required and beneficial. Students are responsible for all announcements and supplements given within each lecture and/or via course email.

4. Any objections to the homework grading, the midterm or final grading should be directed to the instructor. All requests will be considered by the instructor and the student will be notified if a grade change occurs.

Add & Drop: Last day to add/drop a course with no record is scheduled 09/18/2017.

Late Drop: Last day to Drop with “DR” (Graduate) is scheduled 10/16/2017.