

18.650 Statistics for Applications, Fall 2015, MWF 11-12, 4-163

The course website is www-math.mit.edu/~rmd/650 It will get more and more files posted to it as we go along.

R. Dudley, E18-412, 3-7567, rmd@math.mit.edu

You are encouraged to ask me by email questions about problem set problems or course material up to 5 PM the day before a PS is due, or there is an exam, and I'll try to answer to the whole class when appropriate.

Text: *Mathematical Statistics and Data Analysis* by J. Rice, Third Ed., 2007. Substantial changes were made in the third edition, so the second, 1996 edition would not be usable. (As far as we are aware, there is not yet a 4th edition.) We will cover material from Chapters 6 to 15 of the book (not in order). Quite a lot of supplementary handouts will be distributed as we go along. Some probability material to be used is already in the posted files [addnormals.pdf](#) and [gammabeta.pdf](#). We will review other probability as needed.

Prerequisite: 18.440 or 6.041 or the equivalent (one semester of calculus-based probability). The material is also covered in Rice, Chapters 1-5.

Problem set due days will be Wednesdays. Exams will be Wednesdays or Fridays, never Mondays.

Exams: There will not be a final exam. There will be three one-hour in-class closed-book exams during the semester, 1/3 and 2/3 of the way through and one in the next-to-last week of classes. The specific days of the exams will be determined by a class vote on Friday, Sept. 11.

Taking another class that meets at the same time may not be considered a valid reason to take a makeup exam.

There will be 10 problem sets. None will be due in weeks when there are exams. A detailed schedule will be issued after the exams are scheduled.

Problem sets, to be due each week except exam weeks, are due on the due date either in class or to E18-412 by 4 PM that day, unless an exception to this may be announced. Late problem sets will be accepted at 10% off per school day, e.g. if due Friday, then 10% off after 4 PM until Monday at 4, then 20% off until Tuesday at 4PM, etc., until solutions are given out (at the last lecture before an exam, solutions of the last problem set will definitely be given out); 50% off from then until the next exam; after that, 75% off

until the last day of classes.

There will be no penalty for collaboration on problem sets. If you do collaborate, it's preferred that you name your collaborator(s), if any, on your paper.

Collaboration on exams, however, is strictly not allowed. Time limits for the ends of exams will also be strict.