

## Comments on the course prerequisites

The prerequisite for Stat 217 is Stat 216. The prerequisite for Stat 216 is at least a 100 level mathematics course. The material we will cover in Stat 217 requires a solid grasp of the ideas from Stat 216 and an understanding of basic mathematics. Past experience with Stat 217 students indicates that many of you lack both the grasp and the understanding. That is the primary reason people fail this course.

Simply passing Stat 216 does not mean you understand the material well enough to succeed in Stat 217. In previous semesters, 68% of the students that had received a C+ or lower in Stat 216 failed to get through Stat 217 (they dropped or earned less than a C-). Only 20% of the students with a grade above C+ in Stat 216 failed to pass Stat 217.

If you feel that your understanding of the ideas from Stat 216 is a little shaky and you don't want to have to repeat Stat 217 (the only thing worse than taking a course you don't like, is taking it again) you will need to work on filling in the missing pieces. Here is a list of the material, covered in Stat 216, that is used throughout Stat 217:

- Random Variables: Section 4.3, pages 277 - 286.
- Means and Variances: Section 4.4, pages 291 - 297 (not *Beyond the Basics*) pages 298 - 305 (including both Rule 1 and 2 on page 298 but not Rule 3 in box on page 302 or Example 4.28).
- Sampling Distributions: Section 5.2, pages 358 - 365 (plus the linear combination of normal random variables discussed in the *A few more facts* section on pages 365 - 366).
- Confidence Intervals: Section 6.1, pages 382 - 391.
- Hypothesis Testing: Section 6.2, pages 400 - 412 (nothing from the *Two-sided statistical tests and confidence intervals* section, pages 413 - 416).
- Abuse of Tests: Section 6.3, pages 424 - 428.
- You also need to be able to use the normal table in the front of the book and the t-table in the back of the book. In this course we spend most of the time showing you how to get to the point where you just need to look something up in a table ... we assume that you can carry on from there.

Questions about the above material will make up a large part of the first exam. The ideas covered in the above material will be an integral part of all the exams in this course.

## Suggested Problems

Solutions to the even number problems are available online from the course web page:

**Page 286:** 4.41, 42, 45, 47, 53, 54, 57

**Page 305:** 4.59, 65, 67, 69, 73(a,b), 79, 80

**Page 369:** 5.29, 31, 33, 35, 37, 39, 41, 43, 45, 46(a,b,c), 47, 49, 51, 54(a,b), 59

**Page 396:** 6.1, 5, 7, 9, 11, 13, 15(a), 20, 21, 22, 23, 25, 27, 29, 31

**Page 416:** 6.32, 33, 34, 35, 36, 37, 39, 40, 41, 42, 43, 49, 51, 53, 59, 61, 63, 65

**Page 428:** 6.72, 73, 74, 75, 77, 78, 81, 84