

Syllabus and Study Plan for Statistics 221

The Lesson Plan and Syllabus outline that follows assumes that the course will be completed in approximately a 20-week period. You can, of course, submit the assignments more rapidly, **as long as you wait until you receive one graded assignment back from the instructor before sending another one.**

The course is designed with the expectation that you will work independently and come to understand statistics through working with, using, and understanding the textbook, the online "Study Guides," and submitted *Lessons*. The questions contained in the eight lessons that must be submitted are drawn from the textbooks and the *Study Guide* materials. All lessons are completed as 'open book' and include 'fact' questions from the textbook materials as well as 'understanding' questions that require application and computation solutions to statistical problems.

There are three performance evaluations for this course; 1) the eight *Lessons* that are to be submitted, 2) a midcourse examination and, 3) a final examination. The midcourse and final exams also are 'open book' but the length of the exams coupled with a strict time limit almost guarantee that no time will be available to do more than use the textbooks to verify needed formulas and look up needed tabled values.

Each of the performance components will count as follows toward the final grade.

Examination #1 (Midcourse) = Approximately 20%
Examination #2 (Final) = Approximately 30%
Eight Submitted Lessons = Approximately 50%

The actual grading is based on the total points earned (total number of correct answers on the eight lessons, the midcourse exam, and the final exam). The final grades will be based on percentage of total correct answers (points earned). Grading will be as follows:

A = 719 & up points = 93% & up
A- = 702-718 = 90-92%
B+ = 679-701 = 87-89%
B = 641-678 = 83-86%
B- = 624-640 = 80-82%
C+ = 602-623 = 77-79%
C = 563-601 = 73-76%
C- = 546-562 = 70-72%
D+ = 523-545 = 67-69%
D = 485-522 = 63-66%
D- = 468-484 = 60-62%
F = 467 & down = Below 60%

(See the 20-Week Plan below)

Recommended Schedule If You Are Planning To Complete the Course in 20 Weeks

Weeks 1 & 2: Read, study and understand the material from Chapters 1 and 2 in *Howell*. Complete your study and understanding of *Study Guides 1.1 and 1.2*. Submit *Lesson 1* to be graded for credit.

Weeks 3 & 4: Read, study and understand the material from Chapters 3 and 4 in *Howell*. Complete your study and understanding of *Study Guide 2.1 and 2.2*. Submit *Lesson 2* to be graded for credit.

Weeks 5 & 6: Read, study and understand material from Chapters 5 and 6 in *Howell*. Complete your study and understanding of *Study Guide 3.1 and 3.2*. You will begin use of *Bruning and Kintz* for computations of the variance and standard deviation (Section 1.2). Submit *Lesson 3* to be graded for credit.

Weeks 7 & 8: Read, study and understand material Chapters 7 and 8 in *Howell*. Complete your study and understanding of *Study Guide 4.1 and 4.2*. Submit *Lesson 4* to be graded for credit.

Weeks 9 & 10: Read, study and understand material from Chapters 12 and 13 in *Howell*. Use *Bruning and Kintz*, Sections 1.4, 1.6 and 2.1 to guide computations of *t*-tests and confidence intervals. Study and understand *Study Guide 5.1 and 5.2*. Submit *Lesson 5* to be graded for credit.

Weeks 11 & 12: Prepare for and take Examination #1 (*Lesson 6*). This examination is open book and will cover the material in Chapters 1, 2, 3, 4, 5, 6, 7, 8, 12, and 13 in *Howell*, Sections 1.2, 1.4, 1.6, and 2.1 in *Bruning and Kintz*, and *Study Guides 1.1 through 5.2*. It is recommended that you take the *Practice Examination* presented as a study guide to help determine your level of readiness.

Weeks 13 & 14: Read, study and understand the material from Chapters 14 and 15 in *Howell*. Use *Bruning and Kintz*, Sections 1.5 and 2.2 to guide computations of *t*-test and confidence interval. Understand materials presented in *Study Guides 7.1 and 7.2*. Submit *Lesson 7* to be graded for credit.

Weeks 15 & 16: Read, study and understand the material from Chapters 16 and 9 of *Howell*. Use *Bruning and Kintz*, Sections 4.1 and 3.1, to guide computations for the Analysis of Variance and Correlation. Complete study of *Study Guides 8.1 and 8.2*. Submit *Lesson 8* to be graded for credit.

Weeks 17 & 18: Read, study and understand material from Chapters 10 and 19 of *Howell*. Use *Bruning and Kintz*, Section 3.9 to guide computations of Simple Regression, and, Sections 7.2, 7.7 and 7.8 to guide computations for the simple and complex Chi Square tests and *z* for proportions. Complete study of *Study Guides 9.1 and 9.2*. Submit *Lesson 9* to be graded for credit.

Weeks 19 & 20: Prepare for and take the Final Examination (*Lesson 10*). This examination is open book and will cover Chapters 14, 15, 16, 9, 10, and 19 of *Howell*, Sections 1.5, 2.2, 3.1, 3.9, 4.1, 7.2, 7.7, and 7.8 in *Bruning and Kintz*, and, the material in *Study Guide 7.1 through 9.2*. In addition to this material, there will be approximately 20 - 25 review questions over material covered in the first half of the course. Again, a *Practice Examination* is included to assist you in your preparation for the final.