Resource Economics 212: Introductory Statistics for the Social Sciences

ONLINE Spring 2015

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Email: rogers@resecon.umass.edu

Prerequisite:
You need knowledge of high school algebra and some knowledge of MS Excel 2010/3. You must have access to a personal computer running Microsoft’s Windows OS, and secure and fast access to the Internet as all assignments and exams take place using the Internet.

Although some students have done this course without any prior experience with Excel, it does add to your work load and thus increases the amount of time needed each week to do the assignments. This course can be VERY time consuming for some students, see the course evaluations from last year to see how it varies from student to student and for an “average” time spent per week. I expect student’s to spend 15 hours per week during the semester on this course, but it varies from 5 to over 40 hours per week.

Required Text, and other Required Materials that are included in your bundled purchase from McGraw-Hill:

1. Custom Textbook, both print and electronic
2. Student Edition of Minitab
3. Connect Plus (access to our online teaching and assessment tools)

Please go to this site and order your bundled materials. The bundle sells for $59 and includes everything you need for this course other than a computer running Window’s operating system and Microsoft’s Excel program (2010 or 2013).


Those who must try this course using only a Mac computer, without a Window’s OS installed on it, must buy the statistical software needed from Minitab, called Minitab Express, at:


You can try it for a month for free, but then must rent it for $30 per semester. Mac users will also need Microsoft’s Excel program, either running on the Window’s OS or on the Mac version, which differs slightly from the version this course will use and teach with. Thus, again Mac users face greater frustration than those using Windows-based PCs. If you are at all worried about this additional stress and confusion caused by having all instruction based on Windows, we suggest you contact the professor and discuss your concerns or just avoid this Statistics class as many other such classes do not rely on Windows-based computers.

We will be using CONNECT which is a required online homework and assessment management system for this course and is included in your package. Why is Connect Important?

• You’ll be required to submit graded weekly assignments and all quizzes and exams through Connect
• I believe to master Statistics requires doing Statistics, lots of practice improves performance

• Connect provides instant feedback on your practice assignments and scores and helps you learn to solve the assignments

• Connect includes an integrated eBook and free student study tools—all very valuable when you are not home with all your printed materials laid out in front of you.

If you have any questions regarding CONNECT please direct these to McGraw-Hill tech support, either by visiting their website at: www.mhhe.com/support for helpful FAQ’s, or by calling 800-331-5094. If you do contact McGraw-Hill with a question please write down the case number they will give you. They are open Monday-Thursday 9am- Midnight, Fridays 9am-7pm, as well as Sundays 7pm-Midnight, so if you have any questions you will be responsible for following up with them to make sure that you complete the required homework assignment on time.

Other Required Software; Excel 2010 [or 2013] and Minitab Statistical Software:

Our textbook uses Excel and MINITAB thus you will need Microsoft's Excel 2010 [or 2013] and MINTAB. The Student’s version of Minitab is included in your package, but Excel is not. Both Excel and Minitab software packages are available at any UMass PC lab.

For MAC users: Both Excel and the included MINITAB run on a Windows platform, although there is Excel for the Mac it is not identical to the Windows version and Minitab only runs on Windows. It is possible to dual boot a MAC in order to run such software, but Minitab for the Mac is available, at a price $30 per semester from the Minitab Company.

UMass OIT can assist you in the steps needed to make your MAC a “dual booting” computer. If you do not wish to do so, then both the Excel and Minitab software packages are available at any UMass PC lab or you will need to use another computer, one running Windows, to complete this class.

Course Objective:

This is the first course in a two-course sequence for Res Ec majors, but also meets the needs of those students who only need the introductory first semester course. Also, this first course is a General Education R2 course as well as the prerequisite to the second course, Res Ec 213.

When students complete this course we want them to have a working understanding of the methods and skills used to organize data, conduct meaningful analysis and draw inferences from the data. Knowledge of statistics allows you to experience the world in a different light. The skills you will hopefully learn can be used in your everyday decision-making and communication.

As you learn to use Statistics you will be empowered to make informed decisions based on sound information. This skill is valued in an age where numbers are increasingly used, and abused. After taking this course you will be able to test your ideas (hypotheses) with a limited amount of information (data) and to judge the usefulness of survey results commonly found in the media.

Recently, The NY Times has underscored the importance and value of Statistics with this article, For Today’s Graduate, Just One Word: Statistics.
Time Schedule:

Volume I of this text has 9 chapters. We will cover the first 9 chapters in sequential order. In Res Ec 213, if taken on-campus or online next semester, you will cover the remaining chapters, which are in Volume 2 of our custom edition. The course calendar is on our Moodle course site with live links to the lectures as they are posted.

Structure of Course:

The course is structured into 14 Weeks following the UMass Spring semester.

Each WEEK has 5 parts; read assigned reading, listen to recorded lecture videos (usually 2 a week), practice via homework, use the forums to discuss topics, and assess yourself via a quiz:

<table>
<thead>
<tr>
<th>Time period</th>
<th>1—Read</th>
<th>2—Listen</th>
<th>3—Practice</th>
<th>4—Discuss</th>
<th>5—Assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEK 1</td>
<td></td>
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<td></td>
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<tr>
<td>WEEK 2 ...etc</td>
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We cover the 9 chapters of our book in sequential order. Each week will cover sections of a CHAPTER specified below. Each WEEK has the same expectations no matter what material we are covering. Each WEEK ends at midnight on Sunday night and all activities for that week must be completed by that time. Remember: STUFF HAPPENS! And you should not leave things to late Sunday night assuming the Internet connection will be good, that CONNECT will be up and running, and you don’t get an important call that forces you to re-prioritize your life.

Connect Homework Assignments:

I suggest you read the assigned chapter before listening to the lecture for the unit. After reading and listening, then work through the homework assignments in CONNECT. You may do a homework activity as many times as you like, until it expires (before the time designated) and you have full access to feedback and correct answers. We encourage you to discuss any problems with your classmates and learn from each other. The ability to improve your Homework Assignment score stops at midnight [actually one minute before midnight!] EST on the due date, usually Sunday night. You can still work with all the past due homeworks for review and studying. Your combined score from these unit homework assignments will count as 15% of your course grade. Homework assignments are always due on or before midnight on Sunday night (EST) for the week just completed.

Connect Quizzes:

Each week there will be a quiz based on our readings, lectures, and your homework. Again it uses the Internet tool Connect, but since it is an “assessment” of how well you learned the material, the quiz is timed from the moment you open it, the feedback is not available to you and you cannot discuss the problems with others. Quizzes are based on completed readings, Connect homework, and material from prior lectures. A sample of questions is randomly chosen from a population of questions relevant to the chapter(s) we are studying. Sometimes you may be allowed a second attempt at a Quiz so you must pay attention to the directions for each week’s quiz. When you get a second attempt, only your highest score for that quiz will be recorded. All quizzes are timed, usually two hours, and the clock begins whenever you enter the quiz, even if by mistake (e.g., “sorry, but I did not mean to hit that button!”). You may not see the same question two times as you are dealt a new question with each visit. Quizzes are not like homework and you will not have access to feedback during the time the quiz is up. Only after the quiz has expired can you see the feedback. These restrictions are meant to make quizzes more like exams in that they measure your knowledge and your readiness.
for actual exams. Once the quiz has expired you can revisit them with feedback turned on to practice for the exams, but you cannot change your quiz grade. Your CONNECT quizzes will count toward 15% of your course grade.

**Midterm Examinations:**

There will THREE examinations in addition to the final and these will be given online. The dates are:

Exam 1 goes up on Feb 12, 2015 and must be completed by 11:59 pm EST on Feb 19, 2015.
Exam 2 goes up on Mar 12, 2015 and must be completed by 11:59 pm EST on Mar 19, 2015.
Exam 3 goes up on Apr 16, 2015 and must be completed by 11:59 pm EST on Apr 23, 2015.

**Final Examination:**

A comprehensive final exam will be given online; it goes up May 1, 2015 and must be completed by 11:59 pm EST on May 7, 2015.

**Cheating Policy:**

Cheating happens, especially in large on-campus GenEd courses and with online courses. I hate cheaters and if you're caught cheating I will follow the University's established procedures to pursue the matter to the fullest extent possible (see your "Undergraduate Rights and Responsibilities" handbook). Any presentation of someone else’s work as your own, (i.e., that of a friend, peer, professional, websource, text, etc) is cheating and will not be tolerated and will result in all available actions taken against you.

**Summary of Grading Scheme:**

**Course Weights:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Connect Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Connect Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>20%</td>
</tr>
<tr>
<td>Final exam</td>
<td>20%</td>
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**Minimum Grade Guarantee:**

Grades are determined by student performance on the above items, not by negotiation based on other factors affecting our lives. There are no extra credit activities in this class. To allow you to check your grade-to-date, I will use the following minimum grade cutoff points based on a percentage of the total points available:

A = 92, A- = 90, B+ = 86, B = 82 B- = 78, C+ = 74, C = 70, C- = 66, D+ = 62, D = 58 and F<58
Additional Comments:

We will be covering a large body of unfamiliar material in a short period of time. The course is structured so that each new section builds on the concepts and ideas of the previous section. It is important, therefore, that you stay on top of lectures and reading assignments. Statistics is not a subject that you can cram for the night before an exam. The ability to use statistical concepts and methods is best developed through a steady and continuous exposure via lecture, readings, activities and problems—lots of problems.

My best advice from years of teaching this course: DON’T FALL BEHIND.

It is far better to do a little bit each day than to try to do a lot once a week. Reading Stats is not like reading a novel.

I look forward to being your teacher and sharing my love of the material with you.