

AgEcon 2225: Statistical Analysis  
Spring 2015

Instructor: Matt Sveum

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Class Time & Location: 9:30am – 10:45am; Middlebush 210

Office Hours: 11:00–12:00 Tuesday and Thursday; and by appointment

Office Location: 135C Mumford Hall

## Course Description

As an applied economist you will be expected to collect data, organize it, and use statistical procedures to analyze it. You will be expected to communicate the results of your analysis and make recommendations to business or governmental decision makers. We will cover the basic statistical techniques which are the foundations for most statistical analysis. You will be performing calculations and interpreting. You are expected to understand the formulas you will be using.

The course is roughly divided into three sections: 1.) Descriptive Statistics, Probability, Discrete Probability Distributions; 2.) Continuous Probability Distributions, Interval Estimation, Hypothesis Testing; 3.) Analysis of Variance and Regression Analysis.

## Requirements

### Prerequisites

The prerequisites for this course are AgEc 1042 (Microeconomics) and MATH 1100 (College Algebra). I will assume that you have completed these courses, and that you remember the content. If it has been a while since you took these courses, you may want to go back and review the material. You are also welcome to meet with me to discuss material that does not make sense.

### Textbook

The main book for this class is *Essentials of Statistics for Business and Economics* by David Anderson, Dennis Sweeney, and Thomas Williams. This book is available from the Mizzou Store, or other fine book sellers. You may use an older edition if you would like, but you are responsible for chapter and page differences.

You are expected to read the relevant chapters before coming to class. This will help you to better understand the material being taught and to ask better questions. Additionally, clicker quizzes may contain questions on material from the book.

### Technology

You are required to have a clicker for this class. You can purchase a clicker from the bookstore. Follow instructions on Blackboard on how to register it for the class. Clickers must be registered by January 29. Clicker quizzes after this date will count toward your grade.

I will post homework and reading assignments, as well as announcements on Blackboard. You are required to check Blackboard regularly, and all announcements on Blackboard will be assumed to have been read. I will also post grades on Blackboard. You have one week from the date that a

grade is posted to alert me of any mistakes I made. After that time, grade changes can not be guaranteed.

## **Course Elements**

### **Exams (65%)**

There will be two midterm exams and one final. The midterms will be worth 20% of the course grade each and will be on **February 19 and April 9 in class**. The final exam will be worth 25% and will be on **Friday May 15 at 7:30am**. By signing up for this class, you agree to take the final exam as scheduled. All exams are closed book. You will be allowed to use a calculator, but you may not use a cell phone or iPod Touch-type device as a calculator. So make sure that you have a calculator by the first exam. Exams have a strict no-cheating policy. If you are caught using a cell phone, notes, etc during the exams, you will receive a zero for the exam. You will, however, be allowed to use one two-sided 8.5×11 sheet on exams. You may include anything that you would like on it. It needs to be in English, in your own handwriting, and have your name on it.

### **Homework (20%)**

Homework assignments are worth 10 points each and are graded based on your understanding of the material. Assignments will be due at the beginning of class on the due date. Assignments can be handed in until the end of class for a two point penalty. After class has ended, assignments will not be accepted. I will drop the lowest two homework grades.

### **Quizzes and Worksheets (15%)**

There will be clicker quizzes randomly throughout the semester. Each one will consist of 2-4 questions and will help you test your understanding of course topics. Each one will be worth a small number of points. They **must** be taken with a clicker. Worksheets will be done in class, usually on Thursdays, and are graded based on completion. You need to be in class to get full credit. If you miss class on a worksheet day, you can print it off of Blackboard and turn it in at the beginning of the next class for half credit. I will drop your two lowest worksheet grades.

### **Extra Credit (+5%)**

Extra credit will be given before each exam, and potentially at other times during the semester. If you do all extra credit assignments, your grade will go up by five percentage points (half of a letter grade). Doing less than all extra credit will increase your final grade by less than five percentage points.

## **Classroom Expectations**

Economics is a subject that requires you interact closely with the models used in class. Pencil and paper is best for doing this. For this reason, and because of the distractions that they cause, laptops/iPads/etc are not acceptable note-taking devices in class. I expect that you keep cell phones put away, as well. I reserve the right to determine attendance points based on how attentive you are in class. Texting is considered inattentive.

## **Academic Dishonesty**

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably

acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult the course instructor.

## **Students with Disabilities**

If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please let me know as soon as possible.

If disability related accommodations are necessary (for example, a note taker, extended time on exams, captioning), please register with the Office of Disability Services (<http://disabilityservices.missouri.edu>), S5 Memorial Union, 882-4696, and then notify me of your eligibility for reasonable accommodations. For other MU resources for students with disabilities, click on “Disability Resources” on the MU homepage.

## **Intellectual Pluralism**

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the Departmental Chair or Divisional Director; the Director of the Office of Students Rights and Responsibilities (<http://osrr.missouri.edu/>); or the MU Equity Office (<http://equity.missouri.edu/>), or by email at [equity@missouri.edu](mailto:equity@missouri.edu). All students will have the opportunity to submit an anonymous evaluation of the instructor(s) at the end of the course.

## **Recording**

University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in Section 200.015 of the Collected Rules and Regulations. In this class, students may make audio recordings of course activity unless specifically prohibited by the faculty member. However, the redistribution of audio recordings of statements or comments from the course to individuals who are not students in the course is prohibited without the express permission of the faculty member and of any students who are recorded. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters. Video recordings are not allowed.