STAT 462: Applied Regression Analysis
SYLLABUS – Spring 2016, Section 002
Penn State University

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Office Hours: Mon. and Wed. 11:30am – 12:30pm, and by appointment, in 208P Paterno

TA: Jacob Parsons    Email: jlp592@psu.edu
Office Hours: Tue. and Thu. 11:30am – 12:30pm, and by appointment, in 333 Thomas

Mailbox: If you must submit an assignment outside of class, please use the mailboxes for Jacob or Stefanie found in 325 Thomas. Note that 325 is usually locked outside of typical work hours.

Class: MF 10:10am – 11:00am  011 Life Science
       W 10:10am – 11:00am  004 Life Science

Course Description: This is an applied linear regression course that involves hands-on data analysis. Students enrolling for this course should have taken at least one other statistics course and be familiar with the basic fundamentals of statistical testing and estimation.

Materials:


iClicker: In this class we will use iClickers to enhance interactivity and peer-to-peer learning; they will not be used in grading. These can be rented or purchased.

Software: Data analysis is emphasized, so computers will be used frequently during the course. This course will focus on using statistical software Minitab 17 and R, a free open-source program. Both can be found on school computers. Additionally, Minitab 17 can be rented at OntheHub.com or accessed remotely via WebApps, and R may be downloaded and installed on your personal computer from www.r-project.org.

Course Website: Class announcements, materials, and assignments will be regularly posted on Canvas.

Grading Scale:
A (93-100); A- (90-92); B+ (87-89); B (83-86); B- (80-82); C+ (77-79); C (70-76); D (60-69); F (0-59)

Assessments:
- Lesson Concept Quizzes  15%
- Homework  20%
- Midterm Exams  35%
- Final Project  30%
1. **Lesson Concept Quizzes (15%)**: **There will be eight (8) short concept quizzes throughout the semester, one for each lesson.** These are delivered online through Canvas and will be due within **two days** of completing the lesson. You only get one attempt, but they are untimed and you may use any resources you wish.

2. **Homework (20%)**: **There will be eight (8) homework assignments throughout the semester, one for each lesson.** You may need software to answer the questions, but you will have the opportunity to work on these in class. **YOU MUST SHOW ALL WORK TO RECEIVE FULL CREDIT.** A reasonable amount of collaboration is allowed, but each student must turn in his or her own written work which reflects his or her understanding of the material.

   Homework is due at the **START OF CLASS**. **After this time**, you may turn it in the same day before 5:00pm with a 20 point deduction. Any later and you will receive a 0. The **lowest grade will be dropped** prior to calculating the final grade.

3. **Midterm Exams (35%)**: **There will be two (2) midterm examinations, each worth 17.5% of the final grade.** Each exam will be given in-class and will **NOT** require the use of statistical software. **You may only bring and use the following items:** one-page of notes double-sided, plain scratch paper, pen or pencils, and a calculator. You may use no other items nor receive help from anyone.

   Midterm exams **CANNOT** be made up or rescheduled without a legitimate excuse. Midterm #1 will cover Lessons 1 through 3, and Midterm #2 will cover Lessons 4 through 7. Dates of the exams will be announced in class.

4. **Final Project (30%)**: **In lieu of a final exam, there will be a team project.** You will use techniques from class to analyze a data set of your choice and draw conclusions. Each team will conduct a short presentation on their findings and complete a final written report, which will need to be submitted through Canvas by (tentatively) **Thursday, May 5**. However, there will be deadlines throughout the semester for various tasks related to the project. More information on the project, including a timeline, will be given in class and posted on Canvas.

**Extensions**: In cases where you are unable to submit work due to illness, family emergencies, etc., I will consider your request for extension on a case-by-case basis. If you must request an extension, contact me BEFORE THE DEADLINE of the assignment. If you contact me after the deadline, you will receive zero credit, with limited exceptions. Extensions for examinations will **NOT** be granted unless there are extenuating circumstances.
**Academic Integrity:** All Penn State policies regarding ethics and honorable behavior apply to this course. Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. All University policies regarding academic integrity apply to this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Any instances of academic dishonesty WILL be pursued under the University and Eberly College of Science regulations concerning academic integrity.

**ECOS Code of Mutual Respect and Cooperation:** The Eberly College of Science Code of Mutual Respect and Cooperation embodies the values that we hope our faculty, staff, and students possess and will endorse to make The Eberly College of Science a place where every individual feels respected and valued, as well as challenged and rewarded.

**Accommodations for Students with Disabilities:** Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site.

In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines). If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please provide the letter and discuss any adjustments with me as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.