# STA 6167 – COURSE # 17097 STATISTICAL METHODS IN RESEARCH II SPRING 2020 T 2-3, TH 3 @ FLO 100

**INSTRUCTOR:** Dr. Larry Winner

OFFICE: 228 Griffin/Floyd

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**OFFICE HOURS:** TBA (will be posted on Canvas)

**TA:** Michael Kim michaelkkim@ufl.edu Office Hours: TBA

TEXT: Applied Statistical Methods II Course Notes (On class website and

Canvas) and (Optional) Ott and Longnecker, 2015. An Introduction to Statistical Methods & Data Analysis, 7<sup>th</sup> Ed., Cengage.

## **General Topics (Tentative)**

- Multiple Linear Regression (Approx. 10 Lectures)
- Completely Randomized Design (Approx. 1 Lecture)
- Randomized Block and Latin Square Designs (Approx. 2 Lectures)
- Factorial Designs (Fixed, Mixed, Random Effects) (Approx. 5 Lectures)
- Nested Designs (1 Lecture)
- Split-Plot Designs (2 Lectures)
- **Repeated Measures Designs** (1 Lecture)
- Analysis of Covariance (1 Lecture)
- Discrete Probability Distributions / Intro to Generalized Linear Models (1-2 Lectures)

- Logistic Regression (2.5 Lectures)
- **Poisson Regression** (1-2 Lectures)
- Nonlinear Regression (1-2 Lectures)

# Grading:

This course will consist of a series of data analysis projects and 3 exams. The projects will count 25% of final grade, and each exam will count 25%.

- Exam 1: Tuesday, February 1
- Exam 2: Tuesday, March 22
- Exam 3: Tuesday, April 19

Projects and datasets will be posted on UF Canvas.

R code will be provided for all methods covered in the course on class website and UF Canvas.

R can be downloaded for free from the website:

# http://cran.r-project.org/bin/windows/base/

Notes:

- Practice Problems are available from old exams.
- Homework projects will be posted on class website and will be taken up and graded. Projects must be handed in (hard copy), e-mail will not be accepted.
- Exams are 2-hour. You may bring a copy of the necessary table with hand written notes (8.5x11")
- No early exams will be given.
- If due to medical or academic conference reasons, any make-up exams must be taken within 7 days of scheduled exam time.
- Homework will count 25% of your course grade, each exam will be 25%
- Grades are not negotiable.
- You may request problems to be worked out in upcoming class via e-mail. I will not give detailed solutions via e-mail.

## **Course Grade Cut-offs:**

Α	A-	B+	В	B-	C+	С	<b>C</b> -	D	E
92	87	82	70	60	50				

<u>Attendance/Exam/Assignment Policies</u>: While attendance is not taken, students are expected to attend lectures and participate in class. Make-up exams will only be considered with documented medical event or conference attendance (graduate students). Early exams will be given under no circumstances. Assignments are to be handed in during class on the date the assignment is due in paper format. Electronic submission of assignments will not be accepted. Turn off cell phones during classes.

<u>Academic Accommodations:</u> If you have a documented disability and wish to discuss academic accommodations with me, please contact me as soon as possible.

## **University Grading Points:**

Α	A-	B+	В	B-	C+	С	C-	D	E
4	3.67	3.33	3	2.67	2.33	2	1.67	1	0

<u>Online Course Evaluations</u>: The University has an online course evaluation system. Late in each semester (after final withdrawal date), students can go to the GATORRATER portal and evaluate courses. The website is located at: <u>https://evaluations.ufl.edu/evals/Default.aspx</u>.

### **University Policies:**

Academic Dishonesty: All members of the University Community share the responsibility to challenge and make known acts of apparent academic dishonesty. Acts of academic dishonesty will not be tolerated and will be referred to the Student Honor Council.

**Incomplete:** An incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which the student has completed a major portion of the course with a passing grade, been unable to complete course requirements before the end of the term because of extenuating circumstances, and obtained agreement from the instructor and arranged for resolution of the incomplete grade in the next term. Instructors are not required to assign incomplete grades. For complete details please visit: CLAS incomplete grade policies and forms.

### **Campus Resources:**

Counseling and Wellness Center: <u>http://www.counseling.ufl.edu/cwc/</u>

Academic Resources: <u>http://www.ufl.edu/academics/resources/</u>

Disability Resource Center: <u>https://www.dso.ufl.edu/drc/</u>

Student Health Care Center: <u>http://shcc.ufl.edu/</u>