

STA 6207 – Regression Analysis – Fall 2024  
MWF 8:30-9:20 (Period 2) – FLO 230

**Instructor:** Dr. Larry Winner

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**Office Hours:** M 12:2:00, Tu 12:30-2:00, W 12:00-1:30, Th 8:00-9:30

**Text:** Statistical Regression Analysis (Course Notes)

**Supplementary Text:** *Applied Regression Analysis, 2nd. Ed.* by Rawlings, Pantula, Dickey (e-book for UF Students)

**Course Description:**

This course provides a survey of theory and applications in linear regression analysis. A full treatment of the linear regression model is covered, focusing on results from mathematical statistics making use of matrix algebra. Computational methods will be used to analyze datasets based on "canned routines" as well as a matrix language.

**Tentative Topics (Course Notes Sections) [RPD Sections]:**

- Intro to Probability Distributions and Inference (Chapter 1) [N/A]
- Simple Linear Regression in Scalar Form (Chapter 2) [Chapter 1]
- Simple Linear Regression in Matrix Form (Chapter 3) [Chapter 2.1-2.8]
- Distributional Results, Analysis of Variance and Quadratic Forms (Chapter 4) [Chapters 3,4]
- Model Diagnostics and Influence Measures (Chapter 5) [Chapters 10, 11]
- Multiple Regression (Chapter 6) [Chapters 3,7,8,9.6,9.7,12]
  - Model Building: Selection of Independent Variables [Chapter 7]
  - Polynomial Models [Chapter 8]
  - Models with Class Variables [Chapter 9.6-9.7]
  - Transformations [Chapter 12]
- Intro to Nonlinear Models (Chapter 7) [Chapter 15.1-15.3]
- Random Coefficient Regression Models (Chapter 8) [Chapter 18.3]
- Alternative Regression Models (Chapter 9) [N/A]

**Tests and Grading:**

- (Tentative) Exam 1 (7:40AM – 9:20AM) – Wednesday, September 25 – 25%
- (Tentative) Exam 2 (7:40AM – 9:20AM) – Friday, October 25 – 25%
- Exam 3 (7:40AM – 9:20AM) – Monday, December 2 – 25%
- Homework - 25%

**Notes:**

- In-class Exams are closed note. I will provide any formulas if necessary
- No make-up exams will be given except under extreme circumstances. Early exams will be given under no circumstances.
- Homework will be assigned on approximately a bi-weekly basis and you will typically have 4-5 class periods to complete them. No late assignments will be accepted, and you must submit them to UF Canvas. The grader will grade a sample of the assigned problems.
- R code for examples in the Course Notes are available on UF Canvas.

**Maximum Course Grade Cut-offs:**

<b>A</b>	<b>A-</b>	<b>B+</b>	<b>B</b>	<b>B-</b>	<b>C+</b>	<b>C</b>	<b>C-</b>	<b>D</b>	<b>E</b>
<b>93</b>	<b>88</b>	<b>83</b>	<b>75</b>	<b>65</b>	<b>50</b>				

**Attendance/Exam/Assignment Policies:** While attendance is not taken, students are expected to attend lectures and participate in class.

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

**University Grading Points:**

<b>A</b>	<b>A-</b>	<b>B+</b>	<b>B</b>	<b>B-</b>	<b>C+</b>	<b>C</b>	<b>C-</b>	<b>D</b>	<b>E</b>
<b>4</b>	<b>3.67</b>	<b>3.33</b>	<b>3</b>	<b>2.67</b>	<b>2.33</b>	<b>2</b>	<b>1.67</b>	<b>1</b>	<b>0</b>

**Online Course Evaluations:**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under 2 GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

**University Policies:**

**Academic Dishonesty**

UF students are bound by The Honor Pledge which states “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the UF Conduct Code website for more information. If you have any questions or concerns, please consult with the instructor or TAs in this class.

In-Class Recording suggested wording: • Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal education use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by an instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentation such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private 3 conversations between students in the class or between a student and the faculty or guest lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

### **Campus Resources:**

#### **Health and Wellness**

U Matter, We Care: If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450. •

#### **Academic Resources**

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

Career Connections Center: Reitz Union Suite 1300, 352-392- 1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources. Call 866-281-6309 or email [ask@ufl.libanswers.com](mailto:ask@ufl.libanswers.com) for more information.

Teaching Center: 1317 Turlington Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: Daytime (9:30am-3:30pm): 2215 Turlington Hall, 352-846-1138 | Evening (5:00pm-7:00pm): 1545 W University Avenue (Library West, Rm. 339). Help brainstorming, formatting, and writing papers.

Academic Complaints: Office of the Ombuds; Visit the Complaint Portal webpage for more information.

Enrollment Management Complaints (Registrar, Financial Aid, Admissions): View the Student Complaint Procedure webpage for more information

**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.](#)