DSA 5011 INTRODUCTION TO R
Online Course

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Office Hours: Tuesdays 1:00-2:00 CST or by appointment

COURSE DESCRIPTION
R is a free open source statistical programming language used by professionals in every field and industry. This introductory course aims to provide you with the fundamentals of R and R Studio. Instead of passively watching videos, you will apply R to solve real data problems while receiving instant and personalized feedback that guides you to the correct solution.

COURSE GOALS & LEARNING OBJECTIVES
By the end of this course, you will know be able to:
- Read data into R
- Write basic functions
- Produce standard plots
- Manipulate data frames, tables and matrices
- Solve real data problems
- Create graphics and data visualizations using base and packaged functions

LEARNING MANAGEMENT SYSTERM
https://janux.ou.edu

COURSE MEETING TIME & LOCATION
100% Online course. See course schedule

PREREQUISITES
Departmental permission. Graduate Standing.

REQUIRED TEXTBOOKS
There are no required textbooks. Course content will be made available through the JANUX platform.

COURSE FORMAT
The course is delivered in an online format, consisting of lectures, demonstrations, quizzes, and mini projects.

UNIT QUIZZES
Students are responsible for all of the material covered from the readings, lectures, demonstrations, and any other assigned materials. Each unit features a short quiz. Each quiz is designed to check key points from the readings and videos, and to help you prepare for the unit project.

UNIT PROJECTS
Each unit will feature a mini-project. You will be required to integrate and/or apply the knowledge and skills you have previously developed in order to complete a small task.

EVALUATION

Individual grades in the course are determined by a combination of quizzes and projects. All grades will be in points. Total points in the course are distributed as shown below:

Type	Description	Total points
Quizzes	8 quizzes x 5 points each	40
Projects	8 projects x 10 points each	80
	Total	**120**

Students must earn 90% or more of the total points to an "A" in this class, 80-89% to earn a "B," 70-79% to earn a "C," and 60-69% to earn a "D."

LATE POLICY

All assignments will be considered late if not turned in when due, although assignments can be turned in early. Assignments submitted within five days after due date will get partial credit; however assignments submitted more than five days after due date will get 0 point for assignment.

COURSE POLICY ON ACADEMIC INTEGRITY

Cheating is strictly prohibited at the University of Oklahoma. As a member of the OU community it is your responsibility to protect your educational investment by knowing and following the rules. Should you see someone else engaging in this behavior, I encourage you to report it to myself or directly to the Office of Academic Integrity Programs. That student is devaluing not only their degree, but yours, too. Be aware that it is my professional obligation to report academic misconduct, which I will not hesitate to do. Sanctions for academic misconduct can include expulsion from the University and an F in this course, so don't cheat. It's simply not worth it. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html.

REASONABLE ACCOMMODATION POLICY

Students requiring academic accommodation should contact the Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please see the Disability Resource Center website http://www.ou.edu/drc/home.html Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

RELIGIOUS OBSERVANCE

It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty.

TITLE IX RESOURCES AND REPORTING REQUIREMENT

For concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on call 24/7. To learn more or to report an incident, please contact the Sexual Misconduct Office at 405-325-2215 (8 to 5, M-F) or OU Advocates at 405-615-0013 (24/7). For more information, please see http://www.ou.edu/eoo.

ADJUSTMENTS FOR PREGNANCY/CHILDBIRTH RELATED ISSUES

Should you need adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me or the Disability Resource Center at 405/325-3852 as soon as possible.
http://www.ou.edu/eoo/faqs/pregnancy-faqs.html

COURSE SCHEDULE **

Week Beginning	Unit	Description
March 20	0-1	Course Orientation Introduction to R
March 27	2	Scalars, Vectors, Matrices & R as a Calculator
April 3	3	Reading in Data
April 10	4	Lists and Data Frames
April 17	5	Data Types
April 24	6	Plotting in R
May 1	7	Functions & Programming
May 8	8	Using Packages to Extend Base R

**Students are responsible for any changes/additions to this syllabus announced over the course of the semester.