THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES

Course #:	STAT 4329/5329/6329 (CRN 19390/16078/20479)
Course Title:	Statistical Programming
Credit Hrs:	3.0
Term:	Fall 2022
Course Meetings & Location:	MW 1:30 pm – 2:50 pm at Bell Hall 130
Prerequisite Courses:	STAT 4385/5380 with C or better, or its equivalent as approved by the instructor.
Instructor:	Dr. Abhijit Mandal
Office Location:	Bell Hall 313
Contact Info:	Phone: 915-747-8246
	E-mail address: amandal@utep.edu
	Fax # 915-747-6502 (Math Department)
	Emergency Contact: 915-747-5761 (Math Department)
Office Hrs:	Wednesday 10:30 AM – 11:30 AM at Bell Hall 313 (or to be announced in the class)
TA:	Atiqur Chowdhury (E-mail: achowdhury2@miners.utep.edu)

Textbook(s), Materials:	Required:	None
	Suggested:	1) An Introduction to R (https://cran.r-project.org/doc/manuals/r-release/R-intro.pdf)
		2) E. Matthes (2019). Python Crash Course, 2nd ed. https://nostarch.com/pythoncrashcourse2e
		3) A Primer on Scientific Programming with Python by H. P. Langtangen (2016). 5th Edition.

Course Description and Learning Outcomes:	This course introduces students to the principles and concepts of programming in Python and R. Students will be able to manipulate data, create summary reports and lists, edit, and interactively debug code, manage complex data sets, transform, and generate data, create effective graphics for data visualization, create user-defined functions and Python calculations, handle various data formats.
Course Activities/Assignments:	Homework assignments and quizzes will be regularly assigned. There will be two midterms and one final exam.

Assessment of Course Objectives:	*Midterm Exams:* One midterm exam on R and another on Python will be given. *Homework, Quiz:* Homework assignments and quizzes will be regularly assigned. *Final Exam:* The final exam will focus on both R and Python. *Projects:* Students will submit one group project and one individual project. NO LATE COURSEWORK WILL BE ACCEPTED, EXCEPT FOR EXTREME SCENARIOS AS DEEMED BY THE INSTRUCTOR.
Course Schedule:	• Duration: 08/22/2022 – 12/01/2022 • Midterm I: Monday, September 26, 2022, from 1:30 PM to 2:50 PM. • Midterm II: Monday, October 31, 2022, from 1:30 PM to 2:50 PM. • Final exam: Wednesday, December 7, 2022, from 4:00 PM to 6:45 PM. • The dates of the exams listed here are tentative. The exact dates will be announced on Blackboard. • Course-drop deadline: Friday, 10/28/2022 (No "W" will be assigned for dropping the course after the deadline!)
Class Recordings:	Some classes may be recorded. Our use of such technology is governed by the Federal Educational Rights and Privacy Act (FERPA) and UTEP's acceptable-use policy. A recording of class sessions will be kept and stored by UTEP, in accordance with FERPA and UTEP policies. Your instructor will not share the recordings of your class activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. You may not share recordings outside of this course. Doing so may result in disciplinary action.
Grading Policy:	Homework: 25% Midterm I: 20% Midterm II: 20% Final Exam: 25% Project: 10% A bonus of 2% will be given to all students if at least 80% of students fill out the teaching evaluation. The usual grading scale will be used for this course (90–100% = A, 80–89.99% = B, 70–79.99% = C, 60–69.99% = D, 0–59.99% = F).

Make-up Policy:	Make-up work will be given only in the case of a documented emergency. Note that make-up work may be in a different format than the original work, may require more intensive preparation, and may be graded with penalty points. If you miss an assignment and the reason is not considered excusable, you will receive a zero. It is therefore important to reach out to me - in advance if possible - and explain with proper documentation why you missed a given course requirement. Once a deadline has been established for make-up work, no further extensions or exceptions will be granted.
Attendance Policy:	Students are strongly encouraged to attend all class meetings and participate in all activities. It is also important to read the textbooks and work through the examples/programs given in the textbooks and the class. Failure to accomplish the above – at minimum – will almost invariably ensure a less than satisfactory grade for this course.
Academic Integrity Policy:	The University policy is that all suspected cases or acts of alleged scholastic dishonesty must be referred to the OSCCR for investigation and appropriate disposition. Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Each student is responsible for notice of and compliance with the provisions of the Regents' Rules and Regulations, which are available for inspection electronically at http://www.utsystem.edu/bor/rules/homepage.htm. All students are expected and required to obey the law, to comply with the Regents' Rules and Regulations, with System and University rules, with directives issued by an administrative official in the course of his or her authorized duties, and to observe standards of conduct appropriate for the University. A student who enrolls at the University is charged with the obligation to conduct himself/herself in a manner compatible with the University's function as an educational institution.

Any student who engages in conduct that is prohibited by Regents' Rules and Regulations, U. T. System or University rules, specific instructions issued by an administrative official or by federal, state, or local laws is subject to discipline, whether such conduct takes place on or off campus or whether civil or criminal penalties are also imposed for such conduct.

Technology Requirements	Some course contents are delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop (Windows or Mac). You will need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Jupyter notebook, PyCharm (or equivalent IDE for Python programming), R, RStudio and Miktex (or MacTeX for Mac). Check that your computer hardware and software are up-to-date and able to access all parts of the course.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP Help Desk as they are trained specifically in assisting with technological needs of students. Please do not contact the instructor for this type of assistance. The Help Desk is much better equipped to assist you!

Copyright Statement for Course Materials:	All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

Disability Statement and Accommodations Policy	The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services (CASS), see https://www.utep.edu/student-affairs/cass/ada-policies/accommodations-for-individuals-with-disabilities\%20.html. Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the CASS portal, see https://www.utep.edu/student-affairs/cass/aim/index.html.

Military Statement:	If you are a military student with the potential of being called to military service and/or training during the semester, please contact me by the end of the first week of class.
COVID-19 Accommodations	Students are not permitted on campus when they have a positive COVID-19 test, exposure or symptoms. If you are not permitted on campus, you should contact me as soon as possible, so we can arrange necessary and appropriate accommodations.
Resources:	UTEP provides a variety of student services and support:

Technology Resources
- Help Desk: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

Academic Resources
- UTEP Library: Access a wide range of resources including online full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- Math Tutoring Center (MaRCS): Ask a tutor for help and explore other available math resources.

Individual Resources
- Military Student Success Center: Assists personnel in any branch of service to reach their educational goals.
- Center for Accommodations and Support Services: Assists students with ADA-related accommodations for coursework, housing, and internships.

Last updated: 08/22/2022

Disclaimer: This syllabus may be subject to changes if these are deemed necessary by the instructor.