BUSA 523: Business Analytics Programming
COURSE SYLLABUS: Fall 2023

Instructor: Dr. Zaki Malik
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Please use emails to ask me questions, and use BUSA-523 in the subject line of the email. This is the fastest way to reach me.

Office Hours: Thursday 8.30AM – 12PM in Dallas (or by appointment)

COURSE INFORMATION

Course Modality
- Classes will be held on Thursdays at 3.40 PM in Dallas. All course materials will be available through D2L.

Textbook (online versions of any similar book are acceptable too)

Python is open-source, and you can use any free book you can find online. However, if you ask me, the following is a very good resource.

Python Crash Course: A Hands-On, Project-Based Introduction to Programming
        by Eric Matthews
ISBN-10: 1593276036   OR   ISBN-13: 978-1593276034

COURSE DESCRIPTION
This course is designed to introduce business analytics programming in Python to students. Students will learn programming foundations, application development in Python, and how to integrate Python applications with business operations in this class.

COURSE OBJECTIVES

Upon successfully completing this course, students will be able to "do something useful with Python".
- Identify/characterize/define a problem
- Design a program to solve the problem
- Devise comparable program designs

- Create executable code
- Read most Python code
- Write basic tests
- Be able to work in a team environment and come up with a unified data analytics solution
- Show how one program can be executed in multiple ways

GRADING

Labs (A Maximum of 40 Points)
A number of labs will be given during the semester (almost every class). The labs will be handed out in-class and are usually due at the end of the class (or at the end of the day – instructor discretion). The purpose of the labs is student learning, rather than student testing.

Homeworks & Projects (A Maximum of 60 Points)
1-4 homeworks and/or projects will be given during the semester.

Final Grade
At the end of this semester, if your total is between 90 and 100, you will get an A; if it's between 80 and 89, you will get a B, and so on. **Please note that the actual points will be used to calculate your final grade.** No curving will be used in this class.

Points	Grade
90-100	A
80-89	B
70-79	C
60-69	D
below 60	F

TECHNOLOGY REQUIREMENTS

You will need to install Python and a suitable editor (like Geany, Jupyter, Google Collab).

COMMUNICATION AND SUPPORT

If you ask me questions by emails, I will reply within 48 hours. However, I usually answer them much faster.
If you have questions about software operations, please make sure to include the screenshots of the issues in the emails.
All assignment due dates, deadlines, and exam time are central time in the United States.

COURSE AND UNIVERSITY POLICIES

University Specific Procedures

Students with Disabilities
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Gee Library- Room 132
Phone (903) 886-5150 or (903) 886-5835   Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Student Conduct
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook).*

Campus Concealed Carry
Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to ((http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/ 34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

TENTATIVE COURSE OUTLINE

Week	Topic(s)	Chapter
1	Class Introduction Getting Started / Software Installation	Chapter 1
1	Variables	Chapter 2
2	Lists Working with Lists & for Loop	Chapter 3 Chapter 4
2	If Statements	Chapter 5
3	Dictionaries	Chapter 6
3	User Input and while Loop	Chapter 7
4	Functions	Chapter 8
5	Files and Exceptions	Chapter 9
6	Data Science Libraries	Notes
7	Case Analysis	Notes
7	Machine Learning Primer	Notes
8	**Project Demo**	**In-person Demo**