

THE UNIVERSITY OF TEXAS AT EL PASO
Accounting and Information Systems Department

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CIS 4320 Advanced Application Programming, Fall 2021

IMPORTANT: This is an ADVANCED PROGRAMMING class. Students will be actively programming from the first week of class to the last. Students are expected to dedicate hours of study time outside of class.

Class Hours: 3:00 – 4:20 pm, MW, BUSN 3311

Office Hours: TTR, 12noon to 2:30pm, by appointment only

Online Books: A Byte of Python, Swaroop C.H., <https://python.swaroopch.com/>

Additional reading material will be announced during the semester as determined by Dr. Gonzales.

Course Software:

- Python 3.x and IDLE (Python GUI)
- Microsoft SQL Database and Management Studio
- Excel

Course Description: Programming concepts will be used to solve real world business problems. Strong emphasis will be placed on hands-on structured programming. This course is designed for students to experience real-world Information Systems application requirements for data integration between market leading technologies. Using actual IS projects this course will guide students through an advanced application development effort, including the following use cases:

- Using Python structure programming, students will develop a middle-tier application that moves data from files at the OS level through Python and onto MSSQL tables.
- Developing and executing Python and SQL for manipulating data.

Course Instruction: This is a hands-on class where students will be programming from day one. While reading material is recommended, it is the responsibility of the student to research topics covered in class. Some course content may be conducted remotely and the professor reserves the right to change the course content and schedule.

Grade Components:

	Weight
4 Practical Exams (100 points each)	80%
2 Projects (50 points each)	20%
Total (500 points)	100%

Final Grade	Range
A	90% and up
B	80-89%
C	70-79%
D	60-69%
F	below 60%

Exams: All students are required to take the exams at the scheduled time which is to be announced in class. Makeup will only be given to students who have to miss due to “excused absences due to university-recognized activities” or under extreme circumstance. These students are required to send written notice to the instructor about the university-recognized activities ahead of time. See student handbook for a description of these activities.

Final Exam: Any student with a ‘B’ or better after the 3rd exam will not have to take the final.

Practical Exams and Project Grading: Professor will assign exam and project scores based on the following:

- Code execution without errors
- Program accomplishing objectives of assignment

CIS4320 Course Outline
(Professor reserves the right to change the course syllabus.)

Week	Topic	Projects
08/23	- Course Review and VM testing	
08/25	- Review of Modern IS Challenges	
08/30	- Python Review	
09/01	- Variables and Expressions	
09/06	<<< CLOSED >>>	
09/08	- Input and Functions	Assign Project #1 9/08
09/13	- Variables and Expressions	
09/15	- Input and Functions	Project #1 Due 9/15
09/20	- Python Exam Review	
09/22	- Exam #1	
09/27	- Decision and Flow Control	
09/29	- FOR and WHILE Loops - Strings, Lists, and Dictionaries	
10/04	- FOR and WHILE Loops	
10/06	- Strings, Lists, and Dictionaries	
10/11	- Reading Excel and CSV files	
10/13		
10/18	- Python/CSV Exam Review	
10/20	- Exam #2	
10/25	- Relational Database Fundamentals	
10/27	- Python/SQL Concepts	
10/29	<<< DROP DEADLINE >>>	
11/01	- SELECT, INSERT, DELETE, UPDATE	
11/03		Assign Project #2 11/03
11/08	- SELECT, INSERT, DELETE, UPDATE	
11/10		Project #2 Due 11/10
11/15	- Python/SQL Integration	
11/17		
11/22	- Python/SQL Exam Review	
11/24	- Exam #3	
11/29	- Course Review	
12/01		
DEC 12-06	Comprehensive Final Exam	

Students with disabilities: If you feel you may have a disability that requires accommodations, contact the Disabled Student Services Office at 747-5148, go to the Union Bldg. East, room 106, or e-mail dss@utep.edu.

Academic integrity: The University of Texas at El Paso prides itself on its standards of academic excellence. In all matters of intellectual pursuit, UTEP faculty and students must strive to achieve excellence based on the quality of work produced by the individual. In the classroom and in all other academic activities, students are expected to uphold the highest standards of academic integrity. Any form of scholastic dishonesty is an affront to the pursuit of knowledge and jeopardizes the quality of the degree awarded to all graduates of UTEP. It is imperative, therefore, that the members of this academic community understand the regulations pertaining to academic integrity and that all faculty insist on adherence to these standards.

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. Proven violations of the detailed regulations, as printed in the Handbook of Operating Procedures (HOP), and available in the Office of the Dean of Students, and the homepage of The Dean of Students (DOS) at www.utep.edu, may result in sanctions ranging from disciplinary probation, to failing grade on the work in question, to a failing grade in the course, to suspension or dismissal, among others.