



## CSCI 233.61E Application Program Development

COURSE SYLLABUS: Spring 2024

### INSTRUCTOR INFORMATION

<b>Instructor:</b>	Amy Hays M.S., Computer Science
<b>Office Location:</b>	RELLIS ACB1 335
	<a href="https://tamuc.zoom.us/j/92711096337?pwd=cS9UZlIXb2xlc2V1dGtoNnArcDZ5UT09">https://tamuc.zoom.us/j/92711096337?pwd=cS9UZlIXb2xlc2V1dGtoNnArcDZ5UT09</a>
<b>Office Hours:</b>	Mondays, Wednesdays, and Thursdays 10 am to 12 pm Other times by appointment only via email
<b>University Email Address:</b>	amy.hays@tamuc.edu
<b>Preferred Form of Communication:</b>	For all emails, make sure the email the subject line reads: "COSC 233.61E~~".
<b>Communication Response Time:</b>	48 hours

### COURSE INFORMATION

**Lecture:** Meets 1/16/2024 through 5/7/2024  
Mon, Wed, Fri 9:00 a.m. - 9:50 a.m.  
Campus: RELLIS Building: ACB1 Room: 120

**Class Textbook:** None Required. Material from the internet will be assigned as needed.

#### Recommended Textbooks, References and Resources:

For the most part, our course slides and material will be sufficient for understanding course topics. The following textbooks and web resources can be useful as references.

- Python Crash Course, 2nd Edition: A Hands-On, Project-Based Introduction to Programming by Eric Matthes ISBN-10: 1593279280 ISBN-13: 978-1593279288
- Intro to Python for Computer Science and Data Science: Learning to Program with AI, Big Data and The Cloud by Paul J. Deitel , and Harvey Deitel ISBN-13: 978-0135404676 ISBN-10: 0135404673
- Practice of Computing Using Python, The, Student Value Edition, 3rd Edition, by William F. Punch, and Richard Enbody ISBN-13: 978-0134380315 ISBN-10: 0134380312
- Python for Everyone, 2nd Edition by Cay S. Horstmann, Rance D. Nicaise ISBN-13: 978-1119056553 ISBN-10: 1119056551

*The syllabus/schedule are subject to change.*

- Python for Software Design: How to Think Like a Computer Scientist 1st Edition by Allen B. Downey (Author). Available at <http://www.greenteapress.com/thinkpython/thinkpython.html> ISBN-13: 978-0521725965 ISBN-10: 0521725968
- Automate the Boring Stuff with Python: Practical programming for total beginners by Al Sweigart. Available at <https://automatetheboringstuff.com/> ISBN-10: 1593275994 ISBN-13: 978-1593275990

### **Websites:**

- Python for beginners: <https://www.python.org/about/gettingstarted/>
- Learn python: <https://www.learnpython.org/>
- Google's Python Class: <https://developers.google.com/edu/python/>
- The Python Tutorial: <https://docs.python.org/3/tutorial/>
- Tutorialpoint: <https://www.tutorialspoint.com/python/index.htm>

### **Software Required**

Students may develop your programs on any machine that you like: we encourage you to use your own equipment. We provide instructions for setting up a Python programming environment under Windows, OS X, and Linux. You can use one of the several excellent Python IDEs available, with instructor materials covering PyCharm and Anaconda that are freely available for academic use and work on the major computing platforms (Windows, OS X, and Linux).

## **Course Description**

Application Program Development emphasizes software building with the use of integrated development tools and software subsystems for commercial, file management and database applications. Learning activities include laboratory and online tasks to develop the knowledge and skills necessary to write effective computer programs for information system applications.

## **Student Learning Outcomes**

Upon completing this course, students will be able to:

1. Acquire the skills to edit, test and implement software;
2. Develop programs to retrieve data from files for reports;
3. Learn programming constructs and develop programs that use numbers and other simple data types, strings, lists, functions or methods, and classes;
4. Design and develop user interfaces to collect and present data and information;
5. Develop code to catch exceptions and validate data to store in files and databases;
6. Create and work with a database and develop a GUI program.

*The syllabus/schedule are subject to change.*

# **COURSE REQUIREMENTS**

## **Minimal Technical Skills Needed**

Prerequisites: COSC 1436.

## **Instructional Methods**

During this course, we will use traditional and active learning methods, and work together using:

- In-class lectures: using slides, supplementary materials, and hands-on exercises. The syllabus/schedule are subject to change.
- Assignments and labs that will be released via the D2L Learning Management Systems (LMS).
- Individual / group projects.

## **Student Responsibilities or Tips for Success in the Course**

It is expected that you are the owner of your success in this course, including ensuring you understand the expectations, timelines, policies and learning objectives.

Baseline expectations:

- a. Check LMS frequently and remain current with the course content and assignments
- b. Start your homework assignments early so that you can ask for help if needed.
- c. Check the feedback on homework assignments.
- d. Do your own work: you are encouraged to collaborate and consult with classmates to improve your understanding and to develop problem-solving strategies. However, cheating and plagiarism will not be tolerated, i.e. do not copy other people's work.
- e. Communicate with the instructor when you are confused, or having difficulties with the course material / assignment / project.
- f. Get help (sooner than later) if you have challenges or problems:
  - Start or join a study group with classmate(s) from the course to compare notes and discuss class content.
- g. What you get out of any class depends to a very large degree on what you are willing to put into it. Get in the habit of writing little practice programs to try out new language features as we learn them. As you write more programs (even small ones), the process becomes easier, you are much more likely to remember how the language works and to apply it more effectively for data processing.

## **GRADING**

Final grades in this course will be based on the following scale:

*The syllabus/schedule are subject to change.*

A = 90%-100%  
B = 80%-89%  
C = 70%-79%  
D = 60%-69%  
F = 59% or Below

## Assessments

Basis for Evaluation:

Assignments	40%
Project Presentations	20%
Quizzes	20%
Exams	20%

Assignments and term project are to be graded considering the following:

- 1) demonstrating good form; including good organization, remarks, and indentation.
- 2) Submission on time (late submission are subject to the penalty, ref. late submission section).
- 3) Meeting assignment / report technical requirements.

- You are responsible for checking your grades after each assignment. You must report any error or inconsistency to the instructor within 5 business days.

## TECHNOLOGY REQUIREMENTS

### LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

Zoom Video Conferencing Tool

[https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom\\_Account.aspx?source=universalmenu](https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu)

*The syllabus/schedule are subject to change.*

## ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

## COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

### Interaction with Instructor Statement

<b>Office Location:</b>	RELLIS ACB1 335 <a href="https://tamuc.zoom.us/j/92711096337?pwd=cS9UZlIXb2xlY2V1dGtoNnArcDZ5UT09">https://tamuc.zoom.us/j/92711096337?pwd=cS9UZlIXb2xlY2V1dGtoNnArcDZ5UT09</a>
<b>Office Hours:</b>	Mondays, Wednesdays, and Thursdays 10 am to 12 pm Other times by appointment only via email
<b>University Email Address:</b>	amy.hays@tamuc.edu
<b>Preferred Form of Communication:</b>	For all emails, make sure the email the subject line reads: "COSC 233.61E~~".
<b>Communication Response Time:</b>	48 hours

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

### Course Specific Procedures/Policies

### Late Policies

*The syllabus/schedule are subject to change.*

Credit will be given for ONLY those exams, quizzes, and assignments turned in no later than the deadline as announced by the instructor of this class unless prior arrangement has been made with the instructor.

Late assignments can gain partial credit upon the following policy. As per University requirements, assignments submitted within 7 days after the deadline can receive up to 20% deduction, assignments submitted between 8-14 days after the deadline can receive up to 50% deduction.

- **No assignments will be accepted two weeks after the assigned due date.**
- **No assignment will be accepted after the term end day.**
- Exceptions to this policy will only be made in extraordinary circumstances. Please let me know your circumstances.

### **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

## **University Specific Procedures**

### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

### **TAMUC Attendance**

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedures 13.99.99.R0.01](#)

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

### **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

*The syllabus/schedule are subject to change.*

[Undergraduate Academic Dishonesty 13.99.99.R0.03 Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

### **Students with Disabilities-- ADA Statement**

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**

Texas A&M University-Commerce

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

### **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### **Campus Concealed Carry Statement**

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.

*The syllabus/schedule are subject to change.*

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 the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

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.

### **A&M-Commerce Supports Students' Mental Health**

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

### **AI use policy [Draft 2, May 25, 2023]**

**Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.**

**Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).**

**Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If**

*The syllabus/schedule are subject to change.*



**no instructions are provided the student should assume that the use of such software is disallowed.**

**In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.**

**13.99.99.R0.03 Undergraduate Academic Dishonesty**

**13.99.99.R0.10 Graduate Student Academic Dishonesty**

**Department or Accrediting Agency Required Content**

## COURSE OUTLINE / CALENDAR

WEEK OF	CONTENT	Major Events
Jan 15	Introduction, overview, and basics of Python	<b>Jan 15 – MLK Holiday</b>
Jan 22	First program, input, output, variables	Project assignments
Jan 29	Control structures	
Feb 5	Functions and modules	
Feb 12	Program testing	
Feb 19	Lists, tuples, dictionaries, and sets	
Feb 26	<b>Midterm exam</b>	
Mar 4	Strings	
Mar 11	<b>Spring Break</b>	
Mar 18	Files (input, output) and exceptions	
Mar 25	Object-oriented programming (classes and inheritance)	<b>Mar 29 Reading Day - No class</b>
Apr 1	Processing numbers	
Apr 8	Database	
Apr 15	GUI Programming	
Apr 22	Project presentations	Presentations
Apr 29	Project presentations	30 <sup>th</sup> Last day of class
May 2 – May 7	Final exam Week	Final exam

### Submitting Assignments:

- There will be several assignments, labs, and/or quizzes that are tightly related to the class materials and topics. Submissions are expected to be completed in good quality and by the deadlines.
- Your completed work must be placed in the appropriate drop box in D2L Online. **DO NOT EMAIL ME ANY ASSIGNMENTS AS THEY WILL BE DELETED.** If you have challenges in accessing D2L temporarily, you can email me your assignment as proof of on-time submission. **However**, you still need to upload it to the assignment folder as soon the issue is resolved to receive credit.
- You **MUST** check your files before and after uploading them to D2L to ensure they can be open appropriately. In the case that the instructor is not able to open your submission file(s) your submission will not be graded. □
- Unless special instructions are provided, assignments are NOT to be posted on ANY discussion board, online websites, or file-sharing platforms. Please follow the rules for naming and posting assignments.
- All assignments must be submitted using D2L if applicable. Students must adhere to the following rules when submitting assignments. Failure to do so will affect their grades.
  - **File Name:** Should be named according to the following pattern:

*The syllabus/schedule are subject to change.*

<LastName>\_<FirstName>\_AXQY.\*\*, where LastName is the student's last name, FirstName is the student's first name, and X is the assignment number, Y is the question number if there are several questions in the assignment.

- For example, my assignment3, question 2 Python file submission will be named Hays\_Amy\_A3Q2.py for a programming assignment.
- **File Header:** for programming the first lines of the submitted file should include a comment with the following information and format:
  - #
  - # A short description of the program.
  - #
  - # @author Last Name, First Name
  - # @assignment CSCI 333 Assignment X
  - # @date Date
  - #

*Note: The right to modify the presentation order of materials is reserved. Course progress will be based on feedback and suggestions from students. We would cover the course materials, so if we slow in some topics, we must accelerate elsewhere.*

***HAVE A HAPPY AND SUCCESSFUL SESSION***

*The syllabus/schedule are subject to change.*