

## CSCI 233.61E – Application Program Development

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**Course Syllabus: Fall 2021**

**Instructor: Michael J Henry**

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**Preferred Form of Communication: EMAIL**

**Communication Response Time: ~1-2 Business Days**

### **COURSE INFORMATION**

**Textbook:**

Urban, Michael and Joel Murach. Python Programming. Fresno, CA: Murach Books, ISBN 978-1890774-97-4.

**Other Recommended Texts and/or Materials:**

- Python development environment available in the CSci labs and as a freeware download from <https://www.python.org> [a simple install]
- w3Schools.com Python Tutorial
- A usb/flash drive to store files and documents

### **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 class meetings and laboratory sessions, and online tasks to develop the knowledge and skills necessary to write effective computer programs for information system applications. The course prerequisite is an introduction to computer programming such as COSC1436.

Student Learning Outcomes (as measured by assignment scores):

- 1. Acquire the skills to edit, test and implement software using Python IDLE;**
- 2. Learn programming constructs and develop programs that use numbers and other data types, strings, lists, functions or methods, and classes;**
- 3. Develop programs to retrieve data from files for reports;**
- 4. Design and develop user interfaces to collect and present data and information;**
- 5. Create and work with a database and also build a GUI program**

### **TECHNOLOGY REQUIREMENTS**

Note the following:

Ensure that your browser has JavaScript and Cookies enabled.

For desktop systems, you must have Adobe Flash Player 10.1 or greater.

The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:

512MB of RAM, 1 GB or more preferred

Broadband connection - required courses are heavily video intensive

Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: <http://www.java.com/en/download/manual.jsp>

Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported:

Pop-ups are allowed; JavaScript is enabled; Cookies are enabled.

For enhanced web browsing you will need some additional free software (plug-ins). Ensure that you download the free versions of the following software:

Adobe Reader <https://get.adobe.com/reader/>

Adobe Flash Player (*version 17 or later*) <https://get.adobe.com/flashpayer/>

Adobe Shockwave Player <https://get.adobe.com/shockwave/>

Apple Quick Time <http://www.apple.com/quicktime/download/>

At a minimum (for some other courses), you must have Microsoft Office or Open Office.

Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software.

Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required.

## **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

## **COURSE REQUIREMENTS**

### **Minimal Technical Skills Needed**

Students enrolling in this course should have mastered computer essentials including the use of a text editor (e.g. Notepad), a graphical user interface, a common web browser, and programming fundamentals. If a personal computer is preferred rather than a laboratory computer, it is expected that the student can download, install and configure software.

### **Instructional Methods**

This course may include lecture, individual study and laboratory activities to reinforce computer science concepts and further develop skills in computer programming.

### **Student Responsibilities or Tips for Success**

It is expected that the student will regularly access the course website, follow recommended links, complete chapter and other assigned readings, and solve and submit assignments on or before the announced due dates.

## **GRADING**

Final grades in this course will be determined by the points average on assignments.

### **Assessments**

Typical percentages of points earned apply to grades assigned: 90-100% for the grade "A", 80-89% for "B" etc. College policy should be followed to obtain a grade of "X"

## **COURSE AND UNIVERSITY PROCEDURES AND POLICIES**

### **Course Specific Procedures/Policies**

1. Assigned Readings: The student is expected to read assignments before scheduled discussions and graded assignments. And, the student is expected to access the course webpage at <http://csci.website/cs233.html> for assignments and other information.
2. Participation: The student is expected to interact with the course professor, regularly access the course web site, and use the university LeoMail and D2L. Participation should ensure understanding and give feedback for monitoring and assessing progress.
3. Assignments: The student is expected to complete each assignment by the due date. If missed or late it will not be graded. No penalty is incurred if the next assignment is completed on time—that grade will be used for both.

4. Intellectual Honesty: The discovery of plagiarism (example: copying from another class member's assignment solution) will result in a grade of zero on that individually graded activity. According to department policy, a subsequent breach of this rule mandates a grade of "F" for the course.

## **SYLLABUS CHANGE POLICY**

The syllabus is a guide. Circumstances and events, such as student progress or administrative dictate, 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. (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 in an online forum: (see <http://www.albion.com/netiquette/corerules.html>)

### **TAMUC Attendance**

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.

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

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: Undergraduate Academic Dishonesty 13.99.99.R0.03

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

### **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  
Gee Library, Room 162, phone 903.886.5150 or 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. 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.

### **Campus Resources**

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)

### **COURSE OUTLINE / CALENDAR**

## CSCI 233.61E Fall 2021 Semester Schedule

Week	Study Topic / Activity*	Chapter
1	<b>Introduction to programming</b>	<b>1</b>
2	<b>First programs to write</b>	<b>2</b>
3	<b>Coding control statements</b>	<b>3</b>
4	<b>Defining functions and modules</b>	<b>4</b>
5	<b>Program testing</b>	<b>5</b>
6	<b>Lists and tuples</b>	<b>6</b>
7	<b>File input and output</b>	<b>7</b>
8	<b>Exception Handling</b>	<b>8</b>
9	<b>Processing Numbers</b>	<b>9</b>
10	<b>Strings</b>	<b>10</b>
11	<b>Dates and times</b>	<b>11</b>
12	<b>Dictionaries</b>	<b>12</b>
13	<b>Classes</b>	<b>14</b>
14	<b>Databases</b>	<b>17</b>
15	<b>GUI programming</b>	<b>18</b>
16	<b>Finals Week</b>	<b>---</b>

\*Note: includes supplemental study material (exercises and language tutorials)