

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



COSC 1437.01E Programming Fundamentals II

COURSE SYLLABUS: Spring 2024

INSTRUCTOR INFORMATION

Instructor: Dongeun Lee, Ph.D., Associate Professor, Department of Computer Science

Office Location: JOUR 213

Office Hours: Mon 1:00~2:00PM, 3:30~4:30PM / Wed 11:00AM~2:00PM / Zoom meetings will be also held occasionally

University Email Address: Dongeun.Lee@tamuc.edu

Preferred Form of Communication: Discussion Board and Email

Communication Response Time: 48 hours

COURSE INFORMATION

Lecture: Mon/Wed 2:00~3:15PM, JOUR 234

Lab (COSC 1437.01L): Tue 3:30~4:45PM, JOUR 110

Text book: None required. Use any text book of your choice for reference or look up information on about Python, Java, C++ languages on internet.

Software: Python and Java interpreter/compiler of your choice.

Course Description

This is a lecture and laboratory course, and is the second course sequence to introduce computer programming. Three programming languages: Python, Java, and C++, will be taught in this class. Examples and assignments on video game development will be used throughout the semester. Students will learn computational thinking and programming through reflection on their hands-on experiences on video game implementation.

Student Learning Outcomes

1. Review various data types and basic data structures of arrays and lists.

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2. Comprehend data structures composed of heterogeneous items.
3. Become proficient in applying control structures to alter the sequential flow of execution of program statements.
4. Become proficient in applying library functions and creating user-defined functions.
5. Become proficient in function parameter passing, comprehend how it translates to low-level representation, and how primary storage is involved.
6. Learn object-oriented programming, and comprehend how to combine data and operations on the data into an object.
7. Comprehend multidimensional arrays or multidimensional (nested) lists.
8. Comprehend searching and sorting techniques, and learn the difference between those techniques in terms of computational resources.
9. Rewrite programs including game-driven examples originally written in structured programming into programs in object-oriented programming.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students should know the basics of Python and Java to take this course.

Instructional Methods

Face-to-face lectures and lab will be given every week in the class room and/or myLeoOnline (D2L). Students are supposed to download assignments online and submit them on time. Students are also encouraged to utilize discussion boards for Q&A.

Student Responsibilities or Tips for Success in the Course

Assignments and exams will be announced on myLeoOnline (D2L). It is students' responsibility to keep up with the schedule. No makeup exams or assignments.

GRADING

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

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

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Assessments

Basis for Evaluation:

Labs/Assignments/Participation 50%

Midterm Exam 25%

Final Exam 25%

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

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

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.

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.

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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

The instructor will make an effort to answer questions in a timely manner.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

You should do your own work on exams and for programming assignments. Copying another student's work is not acceptable. Any indication of cheating or plagiarism on an exam/assignment will result in an automatic 0 (zero) for the exam/assignment for all students involved. Yet, based on cheating and plagiarism activity in any section of class, instructor holds the right to give F grade to the identified student(s). Regarding codes in assignments, you may be required to explain the code you submitted. In case of discursive explanation, the instructor holds the right to lower your grade. No makeup exams or assignments unless documents explaining emergency are provided.

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).
<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>

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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/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:

[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

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

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<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 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

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COURSE OUTLINE / CALENDAR

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Week 1: Introduction, Review of Programming I concepts
Week 2: Review of Programming I concepts
Week 3: Review of Programming I concepts
Week 4: Multidimensional Arrays
Week 5: Object Oriented Programming
Week 6: Object Oriented Programming
Week 7: Object Oriented Programming
Week 8: Object Oriented Programming
Week 9: Functions & Parameter Passing
Week 10: Functions & Parameter Passing
Week 11: Functions & Parameter Passing
Week 12: Searching and Sorting
Week 13: Searching and Sorting
Week 14: Heterogeneous Items
Week 15: Game Development Wrap Up
Week 16: Reserved

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