COSC 1437.01W Programming Fundamentals II

COURSE SYLLABUS: Fall 2022

INSTRUCTOR INFORMATION

Instructor: Dongeun Lee, Ph.D., Associate Professor, Department of Computer Science
Office Location: JOUR 213
Office Hours: Mon 3:30PM~4:30PM, Fri 10:00AM~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: Web Based Class (myLeoOnline)
Lab (COSC 1437.0LW): Web Based Lab (myLeoOnline D2L), JOUR 200 and JOUR 102 are open for students' use

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

Software: C++ compiler of your choice. For instance, Windows users might consider Bloodshed Dev-C++ or MS Visual Studio; Mac users Xcode; Linux users gcc/g++.

Course Description

Student Learning Outcomes

1. to understand the basic elements of a computer program including documentation, data declaration, and procedural operations
2. to edit, translate, and execute a computer program
3. to write programs that input data from keyboard/file and output to the console/file

The syllabus/schedule are subject to change.

4. to apply control structures to alter the sequential flow of execution of program statements including selection and iteration structures
5. to create user-defined functions, develop programs consisting of multiple functions, and master function parameter passing
6. to define and manipulate arrays
7. to create and access structures composed of heterogeneous items
8. to understand the basic elements of a class

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students should be able to use C++ compiler.

Instructional Methods

Lectures will be given every week on myLeoOnline in the form of power point presentations with voice-over and scripts. Students are supposed to download the files and study each week. Each week will have a discussion board for Q&A.

Student Responsibilities or Tips for Success in the Course

Assignments and exams will be announced on myLeoOnline. 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

Assessments

Basis for Evaluation:
Assignments 50%
Midterm Exam 25%
Final Exam 25%

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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

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.

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

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Interaction with Instructor Statement

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

COURSE AND UNIVERSITY PROCEDURES/POLICIEsS

Course Specific Procedures/Policies

You should do your own work on exams and 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

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 Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

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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

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

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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

Week 1: introduction, comments, data types, cin, cout, operators and operator precedence

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Week 2: relational operators, control structures: selection
Week 3: control structures: selection, control structures: repetition
Week 4: control structures: repetition
Week 5: input/output revisited, file input/output
Week 6: functions: predefined functions, pass by value
Week 7: functions: pass by reference
Week 8: functions: scope, static variables, function overloading, default parameters
Week 9: arrays with different data types, index and access to arrays
Week 10: arrays with different data types, index and access to arrays
Week 11: array operations, C-strings (char arrays), multi-dimensional arrays
Week 12: application of arrays: searching and sorting
Week 13: pointers, new and delete operators, dynamically created arrays
Week 14: records (struct): memory status of structs, arrays in structs, functions with
       structs, structs in structs
Week 15: classes: private and public access, functions as members
Week 16: classes: private and public access, functions as members

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