

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



CSCI 515.01W Fundamentals of Programming C/C++

COURSE SYLLABUS: Fall 2024

INSTRUCTOR INFORMATION

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

Office Location: JOUR 213

Office Hours: Wed 11:00AM~4:00PM / 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 (CSCI 515.0LW): 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

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3. to write programs that input data from keyboard/file and output to the console/file
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 understand the internal representation of the various data types
7. to review the language syntax and learn new syntax you have not previously used in programming applications
8. to correctly solve programming problems and learn how to develop algorithms
9. to examine the internal representation of two and three dimension arrays in C/C++
10. to understand dynamic memory allocation, parameter passing, the use of pointers
11. to create and access structures composed of heterogeneous items
12. 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 will be announced on myLeoOnline. It is students' responsibility to keep up with the schedule.

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 in D2L 100%

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 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

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 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.

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:

13.99.99.R0.03 Undergraduate Academic Dishonesty

<https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

13.99.99.R0.10 Graduate Student Academic Dishonesty

<https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/graduate/13.99.99.R0.10.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

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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/)

<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.

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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
- 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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