

# CSCI 515.0LW Fundamentals of Programming C/C++

COURSE SYLLABUS: Fall 2025

#### INSTRUCTOR INFORMATION

Instructor: Manar Alsaid, Ph.D., Assistant Professor, Department of Computer

Science

Office Location: JOUR 218

Office Hours: Mon 12:00~1:30:00 PM in person and Via Zoom (Link will be shared

in D2L).

Also, By Appointment vias Zoom meetings will be held as needed

University Email Address: Manar.alsaid@etamu.edu

Preferred Form of Communication: Discussion Board and Email Subject of the email is CSCI 515.0LW Fundamentals of Programming

C/C+

#### **COURSE INFORMATION**

Lecture: Online

Lab (CSCI 515.01L): Web-based (myLeoOnline D2L), JOUR 200 and JOUR 102 are

open for students' use

Text book: Recommend C++ Primer by Stanley B. Lippman, Josée Lajoie, and Barbara

E. Moo (5th Edition)

You may access the book

https://tamuc.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006492993 506041&context=L&vid=01TEXAM COM:DEFAULT&lang=en&search scope=MyInst a nd Cl&adaptor=Local%20Search%20Engine&isFrbr=true&tab=Everything&query=any, contains,C%2B%2B%20Primer&sortby=date d&facet=frbrgroupid,include,9032746468 242325060&offset=0

or

https://zhiwpku.com/assets/pdf/books/C++.Primer.5th.Edition 2013.pdf

Aso, You may 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

- 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
- 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

### **COURSE REQUIREMENTS**

### **Minimal Technical Skills Needed**

Students should be able to use C++ compiler.

#### **Instructional Methods**

Lectures will be given every week online. Lab sessions will also be conducted online. Students are supposed to download assignments online and submit them on time. Students are encouraged to utilize discussion boards for Q&A or to attend the live Q&A session to get in-person help from the instructor or colleagues.

# 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

#### Assessments

Basis for Evaluation: Labs/Assignments/Participation 100%

## **TECHNOLOGY REQUIREMENTS**

#### **LMS**

All course sections offered by East Texas A&M University 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 <a href="https://example.com/helpdesk@etamu.edu">helpdesk@etamu.edu</a>.

**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 ETAMU 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

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 <a href="Student Guidebook">Student Guidebook</a>.

 $\underline{http://www.etamu.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as}\\ \underline{px}$ 

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

### **ETAMU Attendance**

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

http://www.etamu.edu/admissions/registrar/generalInformation/attendance.aspx

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

# **Academic Integrity**

East Texas A&M University 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 East Texas A&M University 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 <a href="https://inside.etamu.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf">https://inside.etamu.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf</a>

13.99.99.R0.10 Graduate Student Academic Dishonesty <a href="https://inside.etamu.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/graduate/13.99.99.R0.10.pdf">https://inside.etamu.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/graduate/13.99.99.R0.10.pdf</a>

### 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
East Texas A&M University

Velma K. Waters Library Rm 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

Email: studentdisabilityservices@etamu.edu

Website: Office of Student Disability Resources and Services

http://www.etamu.edu/campusLife/campusServices/studentDisabilityResourcesAndServ

ices/

#### **Nondiscrimination Notice**

East Texas A&M University 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 East Texas A&M University 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 East Texas A&M 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 <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

#### Web url:

http://www.etamu.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# East Texas A&M Supports Students' Mental Health

The Counseling Center at East Texas A&M, 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.etamu.edu/counsel

## **COURSE OUTLINE / CALENDAR**

The course topics may be adjusted to align with evolving student needs and curriculum updates.

Topic/activity
Basic programming elements, Input and Output
Data types and identifiers
Operators and expressions
If statement
Repetition
Function
Function continued
Midterm exam
Array and string
Pointer
Structure
Shallow copy and deep copy
Class and object
Class and information hiding
Class and inheritance
Final exam