

WACO, TEXAS

# COURSE SYLLABUS AND INSTRUCTOR PLAN

# **INTRODUCTION TO C PROGRAMMING**

# COSC 1320 H1

**DEBBIE LAMPRECHT** 

# NOTE: This is a 16-week course. NOTE: This is a Blended/Hybrid course.

# COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at <a href="https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html">https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html</a> on any changes to these guidelines.

AN EQUAL OPPORTUNITY INSTITUTION

SPRING, 2022

# COSC 1320 H1

# **Course Description:**

Introduction to computer programming in the "C" programming language. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files. Semester Hours 3.

# Prerequisites and/or Corequisites:

Prerequisite: COSC 1336 or ENGR 2304 with a grade of C or better

# **Instructor Information:**

Instructor Name: Debbie Lamprecht MCC E-mail dlamprecht@mclennan.edu Office Phone Number: (254) 299-8281 Office Location: BTB 108 Office/Teacher Conference Hours: Hours will be posted on my office window and on Brightspace after the semester gets started. Other times can be arranged.

# **Required Text & Materials:**

Title: MindTap Computing, 1 term (6 months) Instant Access for Malik's C++ Programming: Program Design including Data Structures, 8<sup>th</sup> Edition Author: D. S. Malik Edition: 8<sup>th</sup> Publisher: Cengage ISBN: 978-1-337-63196-9 1 – minimum 4GB USB flashdrive if desired, or use cloud storage.

# MCC Bookstore Website: http://www.mclennan.edu/bookstore/

# Methods of Teaching and Learning:

- A. <u>Lab Assignments</u> (40% of the course grade): These assignments give students an opportunity to apply the skills they will learn in the course. Labs will be assigned throughout the semester.
- B. <u>Lecture and tests</u> (60% of the course grade): Lectures are used to explain the programming concepts. The specific date for each test is posted in the Course Schedule.

#### COSC 1320 H1

#### **Course Objectives and/or Competencies:**

- A. Course Objectives: Student will be able to design, code, and use object oriented programming techniques using C++. Student employ object oriented programs to solve practical problems. Students will be introduced to software engineering and Unified Modeling Language.
- B. Course Competencies: Upon successful completion of this course, students will be able to:
  - 1. Define and explain basic C++ terminology and concepts to include abstraction, polymorphism and inheritance.
  - 2. Identify the various C++ data types and structures and understand how and when to use them in a program
  - 3. Understand top-down design in C++ environment and how to use various types of functions to write modular code.
  - 4. Understand and apply sequential, repetition and decision flow control structures in program design.
  - 5. Understand and utilize sequential file management features of C++.
  - 6. Understand the use of pointers, arrays and data structures in C++.
  - 7. Distinguish between Structured Procedural and Object Oriented techniques in program design in solving general business problems using the C++ language.
  - 8. Use Classes and Objects in an Object Oriented program design.
  - 9. Understand basic Object Oriented Design concepts to include Unified Modeling Language (UML).

#### **Course Outline or Schedule:**

NOTE!!! This schedule is tentative and subject to changes under extenuating circumstances. You will be notified of any change to the schedule via email and an announcement on Brightspace. Dates in Brightspace will be the correct dates for any assignments.

Curriculum	Assessment
Orientation and Introduction	
Code Blocks, Chapter 1 & 2	
Chapter 2 – Basic Elements of C++	
Chapter 3 – Input/Output	
Chapter 4 – Selection	
Chapter 4 Continued	
Review for exam	
Exam 1 – Chapter 1 - 4	Exam 1
Chapter 5 - Repetition	
Chapter 5 - Repetition	
Chapter 6 – User Defined functions	
	Orientation and Introduction   Code Blocks, Chapter 1 & 2   Chapter 2 – Basic Elements of C++   Chapter 3 – Input/Output   Chapter 4 – Selection   Chapter 4 Continued   Review for exam   Exam 1 – Chapter 1 - 4   Chapter 5 - Repetition   Chapter 5 - Repetition

#### COSC 1320 H1

	Spring Break	
Week 9 3/14/2022	Chapter 6 Review for exam 2	
Week 10 3/21/2022	Exam 2 – Chapters 5 & 6	Exam 2
Week 11 3/28/2022	Chapter 8 – Arrays and Strings	
Week 12 4/4/2022	Chapter 10 – Classes	
Week 13 4/11/2022	Chapter 10 - Classes	
Week 14 4/18/2022	Chapter 11 – Inheritance and Composition	
Week 15 4/25/2022	Chapter 11 Review for Final	
Week 16 05/2/2022	<b>Final Exams – Comprehensive</b> 5/5/2021 11:10 a.m. – 1:10 p.m.	Final Exam

<u>Course Contact Information</u>: My primary concern is that you learn the material in this course. However, I can only help if you, the student, keep me informed of any problems or inputs you have with the course, my instruction, and the assignments. Call, Email or come to my office. If you cannot make my office hours, please let me know to schedule another time. The meeting can be set up via Zoom.

- 1. **Brightspace**: I will post announcements regularly to inform you of assignments, class information, or any changes between class times. Please note in the communications section of Brightspace you can access each other's email. Additionally, under the resources area you can find web sites for student services, MCC events, and additional Internet sources to help you with your assignments. If you encounter technical trouble with accessing Brightspace, contact the MCC Network Service hotline at 299-8077 (24 hour service).
- 2. Email: Please use MCC email or Brightspace email feature for all email correspondence. Be sure to include "COSC 1320 01" in the subject line so that I will know what class you are in.

#### **Course Grading Information:**

Lab Assignments 40%

Tests 60%

# Late Work, Attendance, and Make Up Work Policies:

Attendance will be taken at each class meeting. To be counted present, the student must be physically in the classroom, or logged on to Zoom with a camera on. To take this course via Zoom, a camera is required. Anyone on Zoom that turns off the camera, or leaves early will be counted absent.

Students will be permitted to make up class work and assignments missed due to absences caused by (1) authorized participation in official College functions, (2) personal illness, or (3) an illness or a death in the immediate family. It is the instructor's prerogative whether a student

# COSC 1320 H1

may make up work missed due to absences for other reasons. If allowed to make up assignments, they must be turned in within three days of the due date with a penalty of 10 points per day. After three days, the assignment will not be graded. It is the **student's responsibility** to inform the instructor of the reason for an absence and to do so in a timely fashion. Moreover, it is the student's responsibility to keep up with missed material. Finally, due dates will not be modified by absences.

Due dates will be clearly shown on each lab assignment. Missed exams may be made up for authorized absences within one week of the test date. It is the student's responsibility to arrange for a makeup exam.

# **Student Behavioral Expectations or Conduct Policy:**

To be successful in this class it is **crucial** that you as the student carry through with your responsibilities of learning and applying the material. Key to this is:

- A. reading, understanding and abiding by the Syllabus;
- B. checking MCC student email and the discussion forums daily;
- C. keeping up with the readings, complete the assigned tutorials, and taking the chapter reviews on time;
- D. studying appropriately;
- E. devoting the right amount of time to this class to be successful;
- F. being conscientious, responsible and accountable;
- G. contacting instructor with any issues; and
- H. being professional, courteous and respectful to the instructor and to each other.

# \* Click Here for the MCC Academic Integrity Statement

# (www.mclennan.edu/academic-integrity)

The link above will provide you with information about academic integrity, dishonesty, and cheating.

# \* Click Here for the MCC Attendance/Absences Policy

# (https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

\* You will need to access each link separately through your Web browser (for example: Mozilla Firefox, Chrome, Microsoft Edge or Safari) to print each link's information.

# $\begin{array}{c} \text{McLennan} \\ \text{COMMUNITY} \\ \text{COLLEGE} \end{array}$

# ACADEMIC RESOURCES/POLICIES

# Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu 254-299-8122 Room 319, Student Services Center

# <u>Title IX:</u>

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at <u>titleix@mclennan.edu</u> or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <u>http://www.lighthouse-services.com/mclennan/</u>.

Go to McLennan's Title IX webpage at <u>www.mclennan.edu/titleix/</u>. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

# Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <u>http://www.mclennan.edu/campus-resource-guide/</u>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing <u>SuccessCoach@mclennan.edu</u>. Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

# MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <u>https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html</u> to find out more about the emergency grant. The application can be found at <u>https://www.mclennan.edu/foundation/docs/Emergency\_Grant\_Application.pdf</u>.

# MCC Academic Integrity Statement:

Go to <u>www.mclennan.edu/academic-integrity</u> for information about academic integrity, dishonesty, and cheating.

# Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to <u>https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html</u> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

# Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

# Backup Plan for Technology:

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

# Email Policy:

McLennan Community College would like to remind you of the policy (<u>http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</u>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

#### Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

#### Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email <u>Helpdesk@mclennan.edu</u> for help.

# Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

# **Disclaimer:**

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.