

Syllabus: Programming Fundamentals II

Course Number: COSC 1337 Section 01

Semester & Year: Fall 2022

Instructor Information

Name: **Dr. Theresa McDonald, Professor**
Office: Business & Computer Technology Building Room 38
Telephone: (903) 823-3348
E-mail: theresa.mcdonald@texarkanacollege.edu
Office Hours: Posted online or use Teams for meetings

Course Description

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software.

Textbook Information

*Microsoft Visual C# 2019: Introduction to Object-Oriented Programming 7th Edition (2018) by Joyce Farrell. Cengage Learning. **Bundle for Book (Loose-leaf Version) & MindTap V2.0 (1Term Printed Access Card): ISBN 9780357475102.***

****Instead, you may purchase Cengage Unlimited (1 term, 1 year, or 2 year),** which includes MindTap and the electronic version of the textbook. One Cengage Unlimited would be for all your classes that use Cengage for the terms according to the option that you purchase.

Student Learning Outcomes for the Course

1. Identify and explain a programming development lifecycle, including planning, analysis, design, development, and maintenance.
2. Demonstrate a basic understanding of object-oriented programming by using structs and classes in software projects.
3. Use object-oriented programming techniques to develop executable programs that include elements such as inheritance and polymorphism.
4. Document and format code in a consistent manner.
5. Apply basic searching and sorting algorithms in software design.
6. Apply single - and multi-dimensional arrays in software.
7. Use a symbolic debugger to find and fix runtime and logical errors in software.
8. Demonstrate a basic understanding of programming methodologies, including object-oriented, structured, and procedural programming.
9. Describe the phases of program translation from source code to executable code.

These learning outcomes will be measured by completion of:

- Daily homework assignments/quizzes,
- Three tests, and
- Final Exam.

Teaching Methods:

- **Lectures:** It is the student’s responsibility to read the assigned textbook material before attending class. Be prepared to demonstrate your assignment solutions.
- **Assignments/Participation:**
Homework assignments must be completed prior to the beginning of class on the date for which they are due. Late homework will not be accepted. To receive credit, the student may be required to:
 1. submit the entire assignment to the instructor,
 2. verbally explain a problem solution when called upon, or
 3. present a problem solution when called upon.
- **Tests:** Three tests will be given which cover text material and assignments. Tests will be closed book/notes. A "make up" test may be given only with prior instructor approval.
- **Quizzes, Unannounced Tests, or Assignments:** An in-class exercise may be given during any class period. The student should be prepared to be tested upon any previous assignments. There is no provision for "make up" of these quizzes, tests, and assignments.
- **Exam:** Comprehensive final exam will be given covering the semester text material and homework problems. Exam will be closed book/notes.

Student Requirements for Completion of the Course and Due Dates (See Pages 2 & 6)

For the student’s convenience and ease of access, a table containing all exams and assignments has been placed on the last page of this syllabus. A space for the grade for each of these tasks is also provided in order for the student to be able to discern his/her class average at any time. This information is also provided on myTC in the Jenzabar eLearning LMS section for this class.

Student Assessment & Grading Scale

Percentage	From	Final Grade	Average
35%	Average of Quizzes, Unannounced Tests, and Assignments	A	90 - 100
45%	Average of 3 Tests	B	80 - 89.99
		C	70 - 79.99
		D	60 - 69.99
20%	Final	F	Below 60

Username and Passwords

Use your TC Username and Password to access TC computers (ie...b.jones5555).

Your myTC login and email is your TC username followed by @texarkanacollege.edu (ie...b.jones5555@texarkanacollege.edu).

Tentative Course Outline - These dates and assignments are tentative and subject to change with the instructor's discretion.

WEEK	DATES	Monday	Wednesday
1	Aug 17		Introduction, Syllabus, Program Development Life Cycle, Requirements Document, Use Case Definition, Mockup, Event Planning Document
2	Aug 22 & 24	Chapter 1- Programing process, identifiers, comments, IDE	Ch. 2 - Variables, data types, arithmetic operators, binary operators, constants
3	Aug 29 & 31	Chapter 2 & 3	Chapter 3 - Form, toolbox, labels, TextBoxes, naming
4	Sept 5 & 7	Holiday	Chapter 4 - pseudocode, flowchart, if statement, nested if, if else
5	Sept 12 & 14	Conditional AND and OR, truth tables	case, conditional operator, NOT, range check
6	Sept 19 & 21	Test 1	Chapter 5 - Looping
7	Sept 26 & 28	Chapter 5 - while loop, infinite loop, for loop	Do while loop, nested loop, accumulators
8	Oct 3 & 5	Chapter 6 - arrays, foreach, sequential search	parallel array, binary search, sort, reverse
9	Oct 10 & 12	Chapter 6 & 7 two dimensional arrays	Methods, public/private, static/nonstatic
10	Oct 17 & 19	Methods, public/private, static/nonstatic	Test 2
11	Oct 24 & 26	Chapter 11 - Exception handling	Chapter 14 - files, streams
12	Oct 31 & Nov 2	Chapter 11 & 14	Chapter 9 - Classes and objects
13	Nov 7 & 9	Chapter 10 - Inheritance	Chapter 12 - ListBox ComboBox, CheckedListBox, MonthCalendar, DateTimePicker, MenuStrip
14	Nov 14 & 16	Controls,forms, CheckBox, RadioButton, PictureBox	Chapter 13 - Event Handling
15	Nov 21-25	Thanksgiving Break	
16	Nov 28 & 30	Review	Test 3
17	Dec 5 Dec 7, Wednesday	Review FINAL EXAM – Wednesday at 11	

Absentee Policy

Your punctual attendance and your participation are required for successful completion of the course. You may be dropped from the course without notice after a total of two weeks of class absences (3 times tardy counts as one absence). Only currently enrolled students are allowed to attend classes and labs. Any student who officially withdraws from the course before the drop date and before the instructor has dropped the student from the course will receive a grade of "W" unless instructor drops the student with an "F" for cheating.

Any student that just stops coming to class and chooses to make an F, the last date they attended will be listed on the final grade sheet and they will most likely have to pay back money received from grants or scholarships.

Texarkana College’s absentee policy allows instructors to withdraw a student from a course due to excessive absences. If a student leaves and returns during class or leaves the class before the class is over, he/she **may** be considered absent. Three tardies constitute one absence. It is the student’s responsibility to check the syllabus for each instructor’s tardy policy.

In some workforce/vocational areas, such as nursing and cosmetology, certification requirements necessitate an absentee policy that is more stringent than the institutional policy. In these instances, the matter of certification takes precedence over local policies, since certification policies are established by the State of Texas.

Faculty members **are not** obligated to provide opportunities for students to make-up missed assignments and exams as a result of a student’s absence from class. The institution is not required to take attendance with the exception of workforce/vocational areas, where certification requirements require taking attendance. However, experience demonstrates that regular attendance enhances academic success. As such, students are expected to attend each meeting of their registered courses.

A student should not stop attending a class without formally withdrawing from the course by the institutions published Last Day for Students to Drop. If a student stops attending class after the published Last Day for Students to Drop, the student **may** receive a grade of “F” in the class. The instructor will submit the last date of attendance for students receiving a grade of “F” or “W”.

Withdrawal from a course(s) may affect a student’s current or future financial aid eligibility. Students should consult the Financial Aid Office to learn both short and long term consequences of a withdrawal.

Maximum Allowable Absences

After official registration, the following number of unexcused absences will be the maximum allowable before a student **may** be dropped from the class. Mandated program certification requirements detailed for certain programs regarding the maximum allowable unexcused absences takes precedence over the following information. Three tardies count as one absence.

A course that meets for the full 16 week semester	
<i>Class or lab meets An instructor may withdraw student from course if absences exceed</i>	
Once a week (night or Friday classes).....	2 absences
Twice a week (MW or TR classes)	4 absences
Three times a week (MWF or TRF classes).....	6 absences
Four times a week (MTWR classes)	8 absences

Excused Absences

A student's absence due to school trips and/or school business will not be counted against a student's allowable number of absences. Military duty and absences for Holy Days (FBD LEGAL) are covered in a separate section of the catalog and the student handbook. These are the only excused absences that are considered by Texarkana College. Responsibility for work missed for any absence is placed on the student. Instructors are required to allow students to make up work missed if the absence is due to military duty* or religious holy days when students follow the correct notification procedures. Instructors are not required to allow students to make up work for absences due to other reasons. Make-up policies are listed in each individual instructor's syllabus.

**Students interested in Health Occupations should check with the division chair prior to entering the program.*

Make-up Policy

The student is responsible for work missed because of illness, school business, religious holidays, military service or other circumstances and must make arrangements with their instructor prior to their absences. No incomplete grades will be given for failure to attend and participate. If you must quit, you should initiate an official withdrawal in the Admissions Office prior to the last date to drop courses: **Friday, November 18, 2022.**

Class Assignments must be turned in on time. Tests must be made up within 1 week of the scheduled time the class takes the test or by a date set by your instructor provided that the required notification is given to the instructor.

Academic Integrity Statement

Scholastic dishonesty, involving but not limited to cheating on an exam, plagiarism, collusion, or falsification of records will make the student liable for disciplinary action after being investigated by the Dean of Students. Proven violations of this nature will result in the student being dropped from the class with an "F".

This policy applies campus wide, including TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses.

Cheating will not be tolerated. The instructor will drop any student involved in cheating from the course with a grade of "F." All assignments must represent the student's own work. A student may discuss assignments with other students to gain a better understanding of the problem. However, copying assignments, in whole or in part, from ANY source, without explicit instructor direction, is considered plagiarism and will result in a failing grade for the course and possible college disciplinary action.

Classroom Rules of Conduct

You are to be respectful of your instructor and fellow classmates at all times.

As a courtesy, please do not talk, type, or print while the instructor is talking to the class or when a student is asking a question which pertains to the class.

Students should make arrangements with the instructor in advance if they need to leave class before dismissal. There will be a zero-tolerance policy for any behavior that is disruptive of classroom learning. This includes ANY use of vulgar language or rude behavior toward instructor or any other student in the class.

- You are to refrain from "surfing" the Web or accessing any social network sites during class, unless directed by your instructor.
- You are to turn off cell phones, pagers, and any type of audio players.
- You are to remove headphones or ear buds.

- You are encouraged to work together to solve problems; however, you must complete your own work. **Cheating will result in an F for all involved** in the act even if the person is in another class or previous semester.

Additional Classroom Policies

Students are not allowed to bring food/drinks into the classroom/lab or Testing Center. The cost of damage to computer equipment and furniture can be significant due to a minor mishap. Students are not allowed to bring a cellular phone or other wireless communication device for use in a classroom/lab without prior written approval from the instructor.

The viewing of pornography is prohibited and will result in being dropped from class with the grade of "F", and the Dean of Students will take disciplinary action. The use of student e-mail for obscene or pornographic purposes is prohibited. Any form of harassment will result in dismissal from class with the grade of "F", and the Dean of Students will take disciplinary action. The Computer Lab is under camera surveillance.

Classroom Cell Phone Policy:

Students should turn cell phones off or at least put them on silent. **Do not conduct phone calls or text in class.** It can wait. If you must take a call or text, quietly leave the room and return when finished but not during a quiz or exam. Emergency calls for you should go through campus police department at 903-798-3330.

Disability Act Statement:

Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact Tonja Blaise at 903-823-3349 or go by the Department of Disabilities Services located in the Palmer Memorial Library for personal assistance.

If you have an accommodation letter from their office indicating that you have a disability which requires academic accommodations, please present it to me so we can discuss the accommodations that you might need for this class. *It is best to request these changes at the beginning if not before the start of class* so there is ample time to make the accommodations.

Basic Needs Security Statement

Any student who has difficulty affording groceries or accessing enough food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in this course or ability to remain in school, is urged to contact Tonja Blase, Director of Student Retention, at 903.823.3349 for support. Furthermore, please notify the professor if you are comfortable in doing so.

Complaint Process

The complaint process can be found on the Texarkana College website.

Technical Assistance

Help Desk link from TC's main webpage: <https://www.texarkanacollege.edu/helpdesk>

Phone: 903-823-3030

Email: helpdesk@texarkanacollege.edu

Financial Aid:

Attention! Dropping this class may affect your funding in a negative way! You could owe money to the college and/or federal government. Please check with the Financial Aid office before making a decision.

Student Requirements for Completion of the Course (Cont. from page 3)

Assignments	Pages	PROBLEMS	Grade	Score
HW1	Ch. 1, p. 45-46	Programming Exercises 1-1, 1-3, 1-4, 1-6 (#4, 6, 7, 9)		Add the grades of all Homework Assignments (HW), then take that total and divide by 30 to obtain the Average: ____ The divide by number may change to reflect less or more assignments. Compute Homework Assignment Score by multiplying average by 35% = ____
HW2	Ch. 1, p. 46	Debugging Exercises 1-3, 1-4 (a, b)		
HW3	Ch. 1, p. 46	Case Problem 1-1		
HW4	Ch. 1	Unit 1 Two Truths & a Lie Quiz		
HW5	Ch. 2, p. 97-8	Programming Exercises 2-3, 2-6, 2-12		
HW6	Ch. 2, p. 98	Debugging Exercises 2-2, 2-4		
HW7	Ch. 2, p. 98	Case Problem 2-1		
HW8	Ch. 2	Unit 2 Two Truths & a Lie Quiz (timed assignment)		
HW9	Ch. 3, p. 130	Programming Exercises 1 and 3 from the book page 130		
HW10	Ch. 3, p. 131	Debugging Exercises 1.a, b, c, d		
HW11	Ch. 3, p. 131	Case Problem 3-1 from the book		
HW12	Ch. 4, p. 181	Programming Exercises - 4.1, 4.2, 4.3		
HW13	Ch. 4, p. 183	Debugging Exercises 4-1, 4-2		
HW14	Ch. 4, p. 183	Case Problem 4-1		
HW15	Ch. 5, p. 220	Programming Exercises 5-1, 5-3		
HW16	Ch. 5, p. 222	Debugging Exercises 5-2, 5-3		
HW17	Ch. 5, p. 222	Case Problem 5-1		
HW18	Ch. 6, p. 260	Programming Exercise 6-2		
HW19	Ch. 6, p. 260	Programming Exercise 6-4		
HW20	Ch. 6, p. 262	Debugging Exercises 6-1, 6-2, 6-3, 6-4		HW Score: ____ Test Score: ____ Final Exam Score: ____ Add these 3 scores and your course grade is _____.
HW21	Ch. 7, Moodle	Multiply Program (from Logic MindTap) Give starter file		
HW22	Ch. 7, p. 303	Programming Exercises 7-1		
HW23	Ch. 7, p. 303	Programming Exercises 7-2		
HW24	Ch. 7, p. 303	Programming Exercises 7-3		
HW25	Ch. 7, p. 304	Debugging Exercises 7-1, 7-2, 7-3, 7-4		
HW26	Ch. 11, p. 531	Programming Exercise 11-1		
HW27	Ch. 9, p. 414	Programming Exercise 9-1		
HW28	Ch. 9, p. 415	Programming Exercise 9-2		
HW29	Ch. 10, p. 476	Programming Exercise 10-1		
HW30	Ch. 14, p. 692	Programming Exercise 14-1		
Test 1	Ch. 1-4			
Test 2	Ch. 5-7			
Test 3	Ch. 9-10, 14			
Final	Ch. 1-10, 14	Comprehensive		

Alternate Operations during Campus Closure

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, Texarkana College may need to move to altered operations and course delivery methods. During this time, Texarkana College may opt to continue delivery of instruction through methods that include, but are not limited to: online learning management system (Jenzabar or Moodle), online conferencing through TEAMS, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor Texarkana College's website (www.texarkanacollege.edu) for instructions about continuing courses remotely, instructor email notifications on the method of delivery and course-specific communication, and Texarkana College email notifications for important general information.

COVID-19 Online/Virtual Environment Instructional Commitment

The ongoing Covid-19 situation will require that some course materials and instruction are provided through an online and/or virtual format. Even if all or a portion of a class was originally scheduled to meet face to face, social distancing guidelines associated with Covid-19 will limit the number of students who are able to attend face to face classes in person simultaneously. Further, circumstances associated with Covid-19 could cause the college to be forced to shift completely to an online and/or virtual delivery at any time during the semester. While TC faculty members are committed to providing students the option of face to face instruction if possible, students should be prepared to continue their classes in an online and/or virtual environment if necessary. Texarkana College is committed to maintaining engaging, high quality instruction regardless of the delivery format.

Computer Requirement Policy:

Students are required to have a computer with Internet access for classes. The computer must be an actual computer – smart phones, iPads, Androids, Chromebooks, etc., are not acceptable substitutes because they lack software compatibility necessary to complete all assignments and tests. Financial costs for the necessary equipment and internet access are the responsibility of the student.

Students needing to purchase a computer may do so through the Texarkana College Bookstore. Systems purchased through the bookstore meet or exceed all requirements, are competitively priced, and may be purchased using financial aid funds. If the system is purchased through another source, it is the student's responsibility to ensure the system meets all requirements.

Computer systems requirements:

- Webcam, microphone, and speakers or headphones
- Windows 10 or a recent version of Mac OS (minimum Sierra). Windows 10 S mode is not supported
- Hardware capable of running Microsoft Teams (free download) and supports multi-media playback
- Support for Chrome or Microsoft Edge – Note: Firefox, Safari, or other browsers may not work on all TC applications
- Able to run Microsoft Office which will be provided free to TC students
- Adobe Reader or another PDF viewer
- Antivirus software such as Windows Defender or another 3rd party anti-virus solution
- The Respondus Lockdown browser is used for taking tests; therefore, the system must be capable of running this software. Most newer systems that meet other specifications should work.

Students should regularly backup content to prevent loss of coursework due to hardware failure. Backup copies of documents and other coursework may be placed on OneDrive cloud storage. OneDrive is included free of charge for all TC students.

A list of Internet service providers can be found on the TC website at:
<https://www.texarkanacollege.edu/coronavirus/>.