## SYLLABUS CMPS 4143: Contemporary Programming Languages

**Catalog Description:** A study of syntax, semantics, and implementation of a contemporary programming language with emphasis on program development, program structuring, and the program development environment of the language. Assignments focus on representative applications of the language.

Instructor:	Dr. Catherine V. Stringfellow	
Office:	Bolin Science Hall, Room 126A	
Office phone:	397-4578	
<u>E-Mail:</u>	catherine.stringfellow@msutexas.edu	
<u>Virtual Office</u> <u>Hours:</u>	M W 9:30-10:30, 1:30-2pm, T R 1:30-3pm and by appointment https://msutexas-edu.zoom.us/my/ <b>cstringfellow</b>	

# Credits: 3 (3 hour lecture) Course Prerequisite: CMPS 2143: OOP

## **Required Textbook and Materials:**

- <u>Visual C# How to Program</u>, 6<sup>th</sup> edition, Deitel Developer Series , ISBN-13:978-0-13-460154-0
- Visual Studio Software (Labs should be upgraded to VS 2019)

## **General Objectives**

- 1) Introduce students to a contemporary programming language and integrated development environment
- 2) to introduce advanced concepts in object-oriented programming languages
- 3) to introduce the concepts associated with implementing Internet- and Web-based applications that seamlessly integrate with PC-based applications

Specific Objectives: Upon completion of the course students should be able to:

- 1) learn the syntax and structure of C# using the .NET IDE
- 2) understand concepts of typing, scope, data types, inheritance, polymorphism, exception handling, etc., and how they are realized in C#
- 3) apply graphical user interface concepts
- 4) build applications that interact with databases
- 5) build interactive Web documents that respond to client requests .

**Instructional Method:** Primarily lecture. Students and instructor will share their experience of coding programs in C# .NET. The instructor may group students in pairs for the different programming assignments. Class participation is highly recommended.

**Course Assignments and Evaluation:** Students will be required to write five moderately complex programs in C# using the Visual Studio 2020.NET platform. There will also be a few very small programming assignments. These programs will involve applying some of the general concepts learned in class. Good documentation will also be expected! A few homework assignments will also be required.

Final grades will be based on the following criteria.

Activity	percentage of grade
Homework and participation	10%
Programming assignments	45%
Exams (3)	30%
Final	15%

Grades may be determined according to this scale (approximate):

А	90% - 100%	В	80% - 89%
С	70% - 79%	D	60% - 69%

**Makeup Exams and Quizzes:** There are two exams and one final exam. The only acceptable reason for missing an exam is with a valid university excuse (e.g., excuse from the doctor, death in the immediate family, etc.) A makeup exam will only be given to those students who have a valid excuse. If you know ahead of time that you will miss an exam, please see me.

## **Course and Department Policies**

**Attendance Policy:** Although student attendance is not calculated into the grade, attendance will be taken each day to track students. If a student is absent 3 consecutive classes without notifying the instructor, a report will be submitted to the Dean of Students and the student may be dropped from the class.

**Behavior in the classroom:** Students are to assist in maintaining a classroom environment that is conducive to learning. This means that the presence of electronic devices other than your calculator are not to be seen, heard, or implied, ever. Questions are encouraged and discussion is acceptable, provided it is pertinent and does not distract from the lesson.

Late Work: Late Programs will incur penalties. See Late Policy document in D2L.

### Make Up Work/Exams/Quizzes:

- For planned absences: Exam may be taken early by prior arrangement.
- For unplanned absences: The lowest or a missed exam will be replaced with the next lowest non-final exam grade. All other missed exams will receive a zero.

**Computer Requirements:** Taking this class requires you to have access to a computer (with Internet access) to access online course material. *Personal computer technical difficulties will not be considered a reason for extra time to submit assignments, tests, or online discussion postings.* Computers are available on campus in various areas of the buildings, as well as the Academic Success Center. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student helpdesk available to you. The university cannot work directly on student computers due to both liability and resource limitations, however they are able to help you get connected to our online services. For help, log into D2L.

## Policy on Testing Process:

The Department of Computer Science has adopted the following policy related to testing.

- All bags, purses, electronics (turned off), books, etc. will be placed in the front of the room during exams, or in an area designated by the instructor.
- Unless otherwise announced by the instructor, nothing is allowed on the desk but pen/pencil/eraser and test papers.
- A student who leaves the room during an exam must turn in the test and will not be allowed to return.

## **Computer Science Tutoring :**

A tutor may assist with programs and homework for CS classes. The tutor will not do your work.

Academic Misconduct Policy & Procedures: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). The Department of Computer Science had adopted the following policy related to cheating (academic misconduct). The policy will be applied to all instances of cheating on assignments and exams as determined by the instructor of the course. (See below for link to MSU definitions.)

- 1st instance of cheating in a course: The student will be assigned a non-replaceable grade of zero for the assignment, project or exam. *In addition, the student will receive a one letter grade reduction in course.*
- 2nd instance of cheating in a course: The student will receive a grade of F in course & immediately be removed from course.
- All instances of cheating will be reported to the Department Chair and, in the case of graduate students, to the Department Graduate Coordinator.

See Also: <u>MSU Student Handbook</u> available at https://msutexas.edu/academics/hs2/\_assets/files/appeal-policy-notice.pdf.

### **University Policies and Procedures**

## Face Covering: Face Covering Requirement available at

https://msutexas.edu/return-to-campus/\_assets/files/msu-texas-facial-covering-requirement.pdf

**Student with Disabilities:** Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible. Students should present appropriate verification from Disability Support Office during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification has been provided. For additional information, contact the Disability Support Office in Clark Student Center 168 - Phone: (940) 397-4140

### Policy on Concealed Handguns on Campus:

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's webpage at <u>MSU Campus Carry Policy</u> *https://msutexas.edu/campus-carry/rules-policies*. If you have questions or concerns, please contact MSU Chief of Police Patrick Coggins at <u>patrick.coggins@msutexas.edu</u>.

### **Recording of Class Lectures:**

Permission must be requested in writing and obtained from the instructor before recording of class lectures. If permission is granted, the recording may only be used by the student making the recording. Recordings (or any class materials) may NOT be posted on any internet source without written permission of the instructor. Failure to adhere to the policy may result in removal from the course with a grade of F or other appropriate punishment.

#### Midterm Progress Report:

In order to help students keep track of their progress toward course objectives, the instructor for this class will provide a Midterm Progress Report for all students in the course through each student's WebWorld account. Midterm grades will not be reported on the students' transcript; nor will they be calculated in the cumulative GPA. They simply give students an idea of where they stand at the midpoint of the semester. Students earning below a C at the midway point should a) schedule a meeting with the professor and b) Seek out tutoring.

#### **Important Dates**

Visit MSU's Registrars website <u>Important Dates</u> https://msutexas.edu/registrar/\_assets/files/pdfs/fall20front.pdf.

# Fall 2020 TENTATIVE CS4143-ACADEMIC CALENDAR

	Monday	Wednesday	Assg
1	Course Info;	Ch. 2 IDE/14.2 Forms	*prog 1
	CH1: Intro and	Ch 3. Simple C# Apps	
	.NET IDE		
2	Casting	Ch. 5/6 Control Structures	*prog 2
	Ch 7 Methods	Ch 8: Adv Arrays	
3	Labor Day	Ch. 10: OOP	*prog 3
4	EXAM 1	Ch11: Inheritance	PROG4
5	Ch 12: Polymorphism	Ch13: Exception Handling	
6	Ch 21 Array Lists	Ch. 14 Forms; events	PROG 5
7	Ch. 14 Controls	14.11 Mouse events	
8	Ch 15 Menus, Ch 15 Boxes	EXAM 2	PROG 6
9	Sec. 15.9-11	15.12-15.14 MDI, SDI	
	Tree and List View; Tabs		
10	Ch. 17 Files and Streams	Cont.	
11	Serializable Files	Ch24 Graphics Drawing	PROG 7
12	Animation	Ch. 20 Databases	*prog8
13	Data Sources and Sets	EXAM 3	
14	Ch. 20 Querying a DB	THANKSGIVING	
	Work on Prog 9		
15	Work virtually on Prog 9	Review	PROG 9
16 Dec9	FINAL EXAM		
	5:45pm–7:45pm		

\* short program assignment