# CSCI/CMPE 3328 Object Oriented Programming in C#

Section 01, Fall 2017, TR, 12:15pm - 1:30pm

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Office hours: MW 1:30pm – 3pm, TR 11:00am – 12pm, or by appointment

#### Course web site:

All course information, materials and announcements: http://faculty.utrgv.edu/emmett.tomai/courses/3328/

### **Course Description (from the Undergraduate Catalog):**

**CSCI/CMPE 3328 Internet Programming:** The C# programming language and .NET environment will be introduced with an emphasis on windows-based, event driven programming and the use of objects, LINQ and XML. Topics may include UML, generic collections, database connections, XML, inheritance and polymorphism, exception handling, event driven programming, concurrent programming, windows forms, files and streams, databases, and Web Services. Prerequisites: CSCI/CMPE 1370, CSCI 1380 or consent of instructor.

#### Textbook:

This course does not have a required textbook. Web-based resources will be used and linked to from the course web site. For students wanting to follow along in a traditional textbook, we recommend:

Paul Deitel and Harvey Deitel. *Visual C# How to Program*. Any edition will provide the basic foundations needed.

## **Course Objectives:**

This course presents object-oriented programming in Microsoft's C# language. It is an intermediate level software development course. Students will:

- Become familiar with programming in the C# language.
- Learn how to use Microsoft's Visual Studio IDE for coding, compiling and debugging.
- Learn basic GUI development using Windows Forms.
- Learn and apply Object-Oriented Programming principles to larger-scale interactive programs.
- Gain experience implementing, debugging and testing larger-scale interactive programs.

#### **Learning outcomes**

Throughout this course, students will begin to develop:

- (a) An ability to apply knowledge of computing and mathematics appropriate to the discipline
- (b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- (c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- (i) An ability to use current techniques, skills, and tools necessary for computing practice.
- (k) An ability to apply design and development principles in the construction of software systems of varying complexity.

# **Course Requirements:**

Lectures: You are expected to attend every lecture period for this course. If you know you are going to be unable to attend, contact the instructor **beforehand** to arrange your absence. If you do not do so, you will not be given extensions or make-ups for any exercises, exams or other activities.

Lab and in-class exercises: A number of class meetings will take place in the computer lab so that we can do hands-on explorations and exercises as a class. These will be completed during class time and turned in at the end of class. In-class exercises will also be done on paper, often in groups. Labs will often lead into the weekly assignments. You are expected to attend and take part in these exercises.

Assignments and project: The work in this class will be divided into weekly homework assignments where you design, implement, debug and test programs. Assignments will be announced in class and posted on the class website.

*Exams*: There will be a midterm and a final examination in this course. The purpose of these exams is to demonstrate mastery of the material covered by the weekly assignments.

# **Scoring and Grading:**

Lab and in-class exercises	10%
Assignments	55%
Midterm and final	35%
Total possible score (max):	100%

#### Final grade:

90-100%	Α
80-89%	В
70-79%	C

60-69% D 0-59% F

**Note:** Grades on assignments and exams may be curved to reflect the overall performance of the class.

### **Course schedule (subject to change)**

- 1. Introduction to C# and Visual Studio
- 2. Class basics in C#
- 3. Basic GUI with Windows Forms
- 4. Unit Testing
- 5. Class Design
- 6. Interactive Applications
- 7. Interactive Applications
- 8. Midterm
- 9. Collections and Generic Programming
- 10. Inheritance and Polymorphism
- 11. Inheritance and Polymorphism
- 12. Advanced Topic
- 13. Advanced Topic
- 14. Advanced Topic
- 15. Advanced Topic
- 16. Final

#### **Course Policies**

### Late Work Policy:

No work in this course will be accepted late unless specifically extended by the instructor, or arranged beforehand by the student and instructor.

### **Make-up Policy:**

No make-up exams or quizzes will be given except for university sanctioned excused absences. If you miss an exam (for a good reason), it is your responsibility to contact me before the exam, or as soon after the exam as possible.

# **Academic Integrity Policy:**

The University expects a student to maintain a high standard of individual honor in his/her scholastic work. Unless otherwise required, each student is expected to complete his or her assignment individually and independently. Although study together is encouraged, the work handed in for grading by each student is expected to be his or her own. Any form of academic dishonesty will be strictly forbidden and will be punished to the maximum extent. Copying an assignment from another student in this class or obtaining a solution from some other source will lead to disciplinary action. Allowing

another student to copy one's work will be treated as an act of academic dishonesty, leading to the same penalty as copying.

## **Drop Class Policy:**

It is the student's responsibility to Drop the class if desired, and be aware of the drop deadline. The student must drop both CSCI/CMPE 1370 and 1170.

#### Note to students with disabilities:

Students with disabilities are encouraged to contact the Student Accessibility Services office for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Texas Rio Grande Valley to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, contact SAS: University Center 108, <a href="mailto:sas@utrgv.edu">sas@utrgv.edu</a>, 956-665-7005. http://www.utrgv.edu/en-us/student-experience/student-academic-success/student-accessibility-services/

### **Mandatory course evaluation period:**

Students are required to complete an ONLINE evaluation of this course, accessed through your UTPA account (https://my.utrgv.edu/); you will be contacted through email with further instructions on the evaluation process. Students who complete their evaluations on time will have priority access to their grades.

### **Computer use policies:**

Please read and be aware of University policies for computer use, which can be found at: http://www.utrgv.edu/is/\_files/documents/utrgv-aup.pdf.