

**ISM 3232 – 001**  
**Business Application Development**

Spring 2023 – 3 Credits  
Tuesday, Thursday 3:30pm-4:45pm  
CIS 1035

**INSTRUCTOR:** Dr. He Zhang                      Email: **hezhang@usf.edu**  
Office: CIS 2067  
Web Page: <https://my.usf.edu> (USF *Canvas* System)

Office Hours: Monday: 2:00pm-5:00pm  
Office hours will be offered in both face-to-face and online.  
Students can join office hours via Microsoft Team. You can  
contact the GA whenever you have some question.

**TA:** Alexandra Harde                      Email: **hardea@usf.edu**  
Office Hours: TA office hours will be announced soon.  
You can contact the GA whenever you have some question.

**TEXTBOOK:** Required: Starting Out with Visual C#, 5<sup>th</sup> ed., by Tony Gaddis.  
Published by Pearson (2019).

Additional materials will be made available via the USF *Canvas* system.

**DESCRIPTION:** “This course introduces business application development using an object-oriented programming language. Topics include data types, programming constructs, object construction, debugging techniques, and graphical user interfaces. Good program design techniques are emphasized. Applications of increasing complexity are developed.”  
(From the *MIS Program of Study*.)

**PREREQUISITE:** ISM 3011 Information Systems in Organizations (with a grade of “C” or better).  
(This prerequisite may be taken during the same term as this class.)

**OBJECTIVES:** This course is designed for undergraduate students majoring or minoring in business analytics and information systems, as well as those students using this discipline as a concentration in a general business degree program. In this course, students will learn the design and development of computer software written in the C# programming language. In addition to C#-specific skills, the content of the course has been selected so that students will acquire knowledge and analytical skills common to object-oriented software development in general.

**OUTCOMES:** Upon completion of this course, students should be able to:

- understand and properly utilize the Visual Studio development environment
- describe the fundamental concepts, terminology, and syntax of the C# language
- explain the proper implementation of graphical user interface concepts
- design programs that appropriately utilize object-oriented programming concepts

- select and apply proper programming control structures in program development
- employ effective exception handling techniques in the design of C# programs
- analyze business situations to identify opportunities for the application of the programming concepts introduced in this course

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| <b>REQUIREMENTS:</b> Midterm Examination | 20% |
| Final Examination                        | 20% |
| Individual Assignments (4)               | 30% |
| Lab (7)                                  | 10% |
| Quiz                                     | 20% |

See the last page of this syllabus for the relevant dates and descriptions of these course requirements.

- **Quizzes:** Starting from the second week, there will be a quiz in each week, except exam days. All quizzes are based on the material I teach in class. Each quiz lasts about 60 minutes and is worth 20 points. Your score on quizzes is the average of all except the lowest two quizzes, provided you miss less than or equal to 2 quizzes. However, if you miss more than 2 quizzes, your score on quizzes will be 60% of the scores computed in accordance with the above method. And if you miss more than 3 quizzes, your score on quiz will be 40% of the score computed in accordance with the above method. No make-up quiz for whatever reasons. In this semester, quizzes will be open on every Thursday after class until 12pm next Friday. You have 60 minutes to finish the quiz.
- **Assignments:** There will be 4 assignments, which are also based on the materials I teach in class. Cooperation among students is prohibited and would be deemed as violation of academic integrity.
- **Labs:** There will be 7 labs. Time will be reserved in certain lectures for the labs. The due date of the lab will be next day of the class.
- **Online Exams:** There will be 2 open-book online exams, each exam will be open for 3-4 days.

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|-----------------|-------------|------------|
| <b>GRADING:</b> | A+ - 98-100 | C+ - 78-79 |
|                 | A - 92-97   | C - 70-77  |
|                 | A- - 90-91  | C- - 68-69 |
|                 | B+ - 88-89  | D+ - 66-67 |
|                 | B - 82-87   | D - 60-65  |
|                 | B- - 80-81  | D- - 58-59 |
|                 |             | F - 0-57   |

**POLICIES:** Regular class attendance is very important to achieving success in this course. Material not included in the text will be introduced in some classes. Should you need to miss a class, you should inform your instructor as soon as possible in order to find out how best to catch up.

Class meetings for both examinations *must* be attended. Only *emergency* situations will qualify as excused absences for these classes. Should such a situation occur, you must notify your instructor *immediately*. Acceptable documentation of the emergency will be required.

The use of computers during class lectures is strictly restricted to class-related use only (such as program coding, note-taking, or viewing class slides).

\*\*\* Cell phone use of any kind during class lectures is prohibited. During class, all cell phones must be turned off and placed out of sight. \*\*\*

All unauthorized recordings of class are prohibited. Recordings that accommodate individual student needs must be approved by your instructor in advance.

Academic integrity is an absolute course requirement. (See link to USF Academic Integrity policy below.) Any instance of academic dishonesty will result, at the least, in a grade of zero being assigned to the work involved. This policy covers both the Exams and the Individual Assignments. It is considered cheating to either give or receive assistance of any kind on these assignments. It is your responsibility to ensure that your work does not become available to other students.

### USF STANDARD COURSE POLICIES

In addition to the specific course policies listed above, information on the following university standard course policies can be found at the web address shown for each item:

Final Examinations – <http://www.ugs.usf.edu/policy/FinalExams.pdf>

General Attendance – <http://www.ugs.usf.edu/policy/GeneralAttendance.pdf>

Religious Days – <http://www.ugs.usf.edu/policy/ReligiousDays.pdf>

Academic Integrity – <http://www.ugs.usf.edu/policy/AcademicIntegrityOfStudents.pdf>

Academic Disruption – <http://www.ugs.usf.edu/policy/DisruptionOfAcademicProcess.pdf>

Academic Grievance – <http://www.ugs.usf.edu/policy/StudentAcademicGrievanceProcedures.pdf>

Students with Disabilities –

<http://www.usf.edu/student-affairs/student-disabilities-services/documents/sds-staff-handbook.pdf>

**PREPARATION:** Assigned textbook chapters should be read and assigned problems completed in advance of the class in which they will be discussed. This allows class time to be used efficiently and additional topics of interest to be discussed.

A significant amount of work outside of class will be needed for students to adequately master the material necessary to complete the four Individual Assignments. You should plan such time into your regular weekly schedule.

The instructor is readily available outside of class during office hours and via email, if you have questions or need additional assistance. You are strongly encouraged to make use of this help.

**Campus Free Expression:** It is fundamental to the University of South Florida's mission to support an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive.

In the instructional setting, ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. Objective means that the idea(s) presented can be tested by critical peer review and rigorous debate, and that the idea(s) is supported by credible research.

Not all ideas can be supported by objective methods or criteria. Regardless, you may decide that certain ideas are worthy of your personal belief. In this course, however, you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding an idea does not mean that you are required to believe it or agree with it.

**Class Recording**      Classes will be recorded and streamed online. Student's voice and video will be included in the class recording. It is the student's responsibility to make sure the privacy of their surroundings and background is maintained.

## CLASS MEETING SCHEDULE

| <u>Week</u> | <u>Date</u> | <u>Topic</u>   |
|-------------|-------------|--|
| 1           | 01/10       | - Introduction to Course<br>Chapter 1 – Introduction to Computers and Programming<br>- C# LAB 0        |
| 2           | 01/17       | - Chapter 2 – Introduction to Visual C#<br>- C# LAB I  |
| 3           | 01/24       | - Chapter 3 – Processing Data<br>- Chapter 3 – Processing Data   |
| 4           | 01/31       | - Chapter 3 – Processing Data<br>- C# LAB II   |
| 5           | 02/07       | - Chapter 4 – Making Decisions<br>- Chapter 4 – Making Decisions                                       |
| 6           | 02/14       | - Chapter 4 – Making Decisions<br>- C# LAB III   |
| 7           | 02/21       | - Chapter 5 – Loops, Files, and Random Numbers<br>- Chapter 5 – Loops, Files, and Random Numbers       |
| 8           | 02/28       | - <b>Midterm Review</b><br>- <b>Midterm Examination (the exam will be open for several days)</b>       |
| 9           | 03/07       | - Chapter 6 – Modularizing Your Code with Methods<br>- Chapter 6 – Modularizing Your Code with Methods |
| 10          | 03/14       | - Spring Break   |
| 11          | 03/21       | - Chapter 6 – Modularizing Your Code with Methods<br>- C# LAB IV                                       |
| 11          | 03/28       | - Chapter 7 – Arrays and Lists<br>- Chapter 7 – Arrays and Lists                                       |
| 12          | 04/04       | - Chapter 7 – Arrays and Lists<br>- Chapter 7 – Arrays and Lists                                       |
| 13          | 04/11       | - Chapter 10 – Introduction to Classes<br>- C# LAB V   |
| 14          | 04/18       | - Chapter 10 – Introduction to Classes<br>- Chapter 8 – Text Processing                                |
| 15          | 04/25       | - Chapter 9 – Structures, Enumerated Types, and Dictionaries<br>- C# LAB VI                            |

**NOTE:** The withdrawal deadline for this semester is Saturday, October 29th.

## **SCHEDULE FOR ASSIGNMENTS / EXAMS**

**➔ All due dates are absolute deadlines – no late work will be accepted. ⬅**

(Assigned work is due by the date and time indicated on the assignment handout.)

### **Assignment #1**

|            |        |       |
|------------|--------|-------|
| Given out: | Week 4 | 01/30 |
| Due:       | Week 5 | 02/08 |

Assignment #1 will involve the creation of a GUI application demonstrating concepts presented through Chapter 3 of the course textbook.

### **Assignment #2**

|            |        |       |
|------------|--------|-------|
| Given out: | Week 6 | 02/13 |
| Due:       | Week 7 | 02/22 |

Assignment #2 will involve the creation of a GUI application demonstrating concepts presented through Chapter 4 of the course textbook.

### **Midterm Exam**

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|-------|--------|
| Date: | Week 8 |
|-------|--------|

The Midterm Exam will include questions (in a variety of formats) from all course materials covered to this point of the semester.

### **Assignment #3**

|            |         |       |
|------------|---------|-------|
| Given out: | Week 12 | 03/27 |
| Due:       | Week 13 | 04/05 |

Assignment #3 will involve the creation of a GUI application demonstrating concepts presented through Chapter 6 of the course textbook.

### **Assignment #4**

|            |         |       |
|------------|---------|-------|
| Given out: | Week 15 | 04/17 |
| Due:       | Week 16 | 04/26 |

Assignment #4 will involve the creation of a GUI application demonstrating concepts presented through Chapter 10 of the course textbook.

### **Final Exam**

|       |         |
|-------|---------|
| Date: | Week 17 |
|-------|---------|

The Final Exam will include questions (in a variety of formats) primarily from materials covered after the Midterm Exam to the end of the semester.

***Communications to you from your instructor via Canvas and in class meetings during the semester may supersede information contained in this syllabus.***