Department of Information Systems & Operations Management

MIS 302 - Business Applications Development

Course Syllabus

Description

Introductions to Computers and Programming, Processing Data, Making Decisions, Algorithm Development and Control Statements, Classes, Objects, Methods, Variables, Arrays, Object-Oriented Design Principles, Event-Driven Programming, User Interface Programming, User Interface Controls, Functional Programming, Data Binding and Database Access, Inheritance and Polymorphism, Collections, Exception Handling and Debugging, Cross Platform Application Development**.**

Objectives

1. To become familiar with programming using object-oriented programming tools**.**
2. To learn and apply Object-Oriented Programming principles to larger-scale interactive programs.
3. To gain experience implementing, debugging, and testing larger-scale interactive programs.

Learning Outcomes

Upon successful completion, students will:
1. Demonstrate understanding of event-driven programming and graphical user interface design.
2. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
3. Develop programs incorporating computer graphics elements.
4. Enhance teamwork and project management skills through the completion of a semester-long project.

Textbook and Software

Deitel, P. and Deitel, H. (2016). *Visual C# How to Program* (6th Edition). Upper Saddle River, NJ: Prentice Hall.
Required Software: C# 6.0 and Microsoft Visual Studio 2015 *(or a newer version)*.

Attendance

All students must attend classes on time. Coming in late disrupts class and is distracting to the learning environment. Students who come late or leave before class ends will be marked **absent**. Any Participant who misses **6** meetings with no formal KFUPM excuse will receive a "DN" grade in the course. Although there is no grade for attendance, missing more than two classes (without an official excuse) will lower your final grade. Each absence after two absences will result in a -1% of the course total grade. To qualify for an excused absence, students must submit the official document to the instructor within **one week of their absences**. Unofficial excuses will not be accepted.

Course Policy

1. Issues discussed in the textbook, classwork, assignments, handouts, web notes, and lectures are subject to be in the quizzes/exams.
2. Classwork/Projects must be submitted on the due date in class as announced by the instructor.
3. You must always endeavor to provide a complete and satisfactory solution, but if you are unable to do so, at least deliver the work you have managed to complete on time.
4. **No late submissions will be accepted**. A lower grade will be the consequence of failing to make the deliveries within the deadline. No excuses are considered or accepted.
5. You may consult with your colleagues in approaching and designing the solution, however, **the final submission must be your own effort and work**. Project and homework assignments are self-dependent, and you will receive extremely little or no assistance from your instructor for completing the assignments.
6. **CHEATING** will result in an **"F" grade** in the course, and further disciplinary action will be pursued.

Ethical Conduct: appropriate classroom behavior and honesty are required to pass this class. Any evidence of cheating will result in a **"DN"** grade for the course.

Course Requirements

Examinations: There will be two exams, one midterm and one comprehensive final exam. Exam topics, date, and time will be announced on the course page on Blackboard. Exams are a mixture of multiple choice and programming problems (i.e., students should expect to write code segments from start to finish).

Quizzes: Preannounced quizzes and in-class assignments will be conducted during lectures' sessions. Unless the student submitted a formal KFUPM absence excuse, there are NO make-up quizzes.

Assignments and Classwork: Programming assignments and classwork (in-class tasks) will be given throughout the semester. These assignments will require the student to integrate the information learned in class and from the textbook and any related external material to produce non-trivial business solutions. Assignments will be announced on the Blackboard and will be timed. Unless the student submitted a formal KFUPM absence excuse, there is NO make-up for in-class tasks.

Term Project: There will be one group term project to be submitted and presented during the last week of the semester. Students will present their final work in groups and should be able to answer any question raised by the instructor or the audience about their work/code. All students – in the same group - must work together and must write approximately the same portion of the code. All of them should understand completely what is being written since they will have to answer their questions individually during the presentation. Project description and guidelines will be available on the Blackboard during the semester.

In-Class Participation: To gain points, you must display preparation and substantive engagement with the lecture, discussion, and with your classmates' discussions and presentations. Do not assume that you will receive the participation grade (5%) if you attend all classes without participation. In other words, if you never participate in in-class (e.g., asking and answering questions, contributing to class discussions and exercises, etc.), you will not gain any points.

Grading Criteria

Assignments requiring development of programs using object-oriented programming environment will be assigned and graded for *functionality*, *quality*, and *completion*. Thus, the instructor will grade each assignment based on these three criteria. Often, there is more than one way to solve the problem for the program assignments. In general, the submitted work is:

1. Well commented and documented,
2. Expected to execute properly,
3. Having accurate output,
4. Submitted by or before the announced deadline, and
5. Following the instructions of the stated assignment.

Grade Distribution

Item	Percent
Midterm Exam	15%
Final Exam (comprehensive)	25%
Quizzes	20%
Assignments and Classwork	20%
Term Project	15%
In-class Participation	5%
Total	100%

Grading Scale

Grades will be determined according to the following percentages:

A+	95% and above	A	90% - less than 95%
B+	85% - less than 90%	B	80% - less than 85%
C+	75% - less than 80%	C	70% - less than 75%
D+	65% - less than 70%	D	60% - less than 65%
F	below 60		

Tentative Schedule (Details subject to change as we go - See Blackboard for more details)

Week#	Topics
1	Chapters 1-3 (chapters 1 and 2are self-Reading from the Textbook)
2	Chapter 4
3	Chapter 5
4	Chapter 6
5	Chapter 7
6	Chapter 8
7	Midterm Exam
8	Chapter 14
9	Chapter 15
10	Chapter 16
11	Chapter 17
12	Chapter 22
13	Chapter 25
14	Chapter 29 - 30
15	Project Presentations
Exam Weeks	Final Exam (comprehensive)

Note: Additional web-based readings and resources will be listed in Blackboard