

Information Systems 320A/B

Winter 2002

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Office Hours: Tu/Th 1:00 – 3:00 and by appointment
Required Text: Programming Business Applications with Visual Basic 6.0, Burrows & Langford.

Course Description: This course is an introductory course in applications programming. It focuses on building applications that are well structured and maintainable using the Visual Basic programming environment. The development of a computer program involves rigorous thought about the decomposition of a problem into sub problems, the sequencing of steps, the use of visual objects on the screen, the selection of data structures, and the meaning of statements in a programming language. The objective of all programming is to model or simulate some rationally describable process – in the real world or imaginary – as a logical and arithmetic procedure. The essence of programming is creating within the computer a world of one's own invention. This process can be challenging and at times tedious, but the result can also be very satisfying and rewarding.

The course uses Microsoft's Visual Basic (VB) programming language and development environment. This language is very powerful and provides programming tools to support state-of-the-art graphical applications. VB is an *event-driven* system. In event-driven programs, the program responds to user actions such as the clicking of the mouse button. Creating a VB project involves designing the interface (placing objects such as buttons, text fields, windows, etc. on the interface), selecting the appropriate data structures and algorithms, and programming the objects to respond to various user actions. VB is a widely used environment for the development of business information systems.

Requirements. Grades will be determined based upon performance on two exams, a series of assignments, and the instructor's assessment of your effort in the course. The weights of these components are:

Exam 1	25%
Exam 2	25%
Programming Assignments	40%
Effort	10%

The exams will consist of short answer questions and short problems. A limited number of notes will be permitted for the exams.

Programming assignments are to be the result of individual work (they are not group or team activities). You are expected to do your own work. They increase in difficulty and hence the time required completing them generally increases as the quarter progresses. Start early and be sure to allocate sufficient time to fully test and debug your programs. Programming assignments are due at the beginning of class on the assigned date. Unless arranged in advance, late work will not be accepted. Class attendance will impact the "effort" part of your grade.

Programming assignments are turned in using zip archives as email attachments. Instructions for this process will be distributed in separate documents.

Course Outline — Winter 02

1/8	Session 1: Course Introduction. Read Ch 1.	
1/10	Session 2: VB Environment. Read Ch 2.	
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1/15	Session 3: Constants and Variables. Read Ch 3.	
1/17	Session 4: Expressions and String Manipulation. Read Ch 4.	Assignment #1 due
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1/22	Session 5: Decision Making. Read Ch 5.	
1/24	Session 6: Decision Making (cont.).	Assignment #2 due
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1/29	Session 7: Procedures and Functions. Read Ch 6.	
1/31	Session 8: Procedures and Functions (cont.).	Assignment #3 due
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2/5	Session 9: Review for Exam	
2/7	Exam 1	
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2/12	Session 10: Repetition. Read Ch 7.	
2/14	Session 11: Repetition (cont.).	Assignment #4 due
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2/19	Session 12: Database Processing. Read Ch 8.	
2/21	Session 13: Database Processing (cont.).	
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2/26	Session 14: Arrays. Read Ch 9.	
2/28	Session 15: Arrays (cont.).	Assignment #5 due
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3/5	Session 16: Programmer-Defined Classes and Object-Oriented Programming. Read Ch 10.4.	
3/7	Session 17: Browser scripting with VBScript.	
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3/12	Session 18: Review for Exam.	Assignment #6 due
3/14	Exam 2	
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Note: Assignments will be distributed in class.