

#### **COURSE SYLLABUS**

Course: **ISYS 3393 Business Application Development Fundamentals** Prerequisite: ISYS 2263 or CSCE 2014 with a grade of "C" or better.

## **Course Description:**

Welcome to ISYS 3393 Business Application Programming. Software development is a fundamental skill for information technology professionals in the workplace. The purpose of this course is to provide students with fundamental programming skills and an understanding of software design. More specifically, students are expected to become familiar with object-oriented software design in the Visual Basic programming environment.

## **Description:**

The course focuses on principles of design and development of Windows applications using cutting edge visual development tools included in Visual Studio. Programming will be done in Visual Basic 2010. The prerequisite for this course is an introduction to programming concepts.

#### Text:

Julia Case Bradley & Anita C. Millspaugh (2011). Programming in Visual Basic 2010. McGraw Hill.

## **Content-Blackboard System:**

This course will utilize Blackboard to provide supplementary information for the course. Blackboard will contain PowerPoint slides, assignments, quizzes, exams, class announcements, the course syllabus, and other information for the course. If you need help with blackboard visit <a href="http://bbsupport.uark.edu/help/">http://bbsupport.uark.edu/help/</a> or call 479-575-6804/479-575-2904

# Grading, Exams, and Assignments:

Final scores will be computed as the following:

| Grading                          | Points |
|----------------------------------|--------|
| Midterm                          | 100    |
| Final                            | 100    |
| Quizzes 7 (out of 8) $\times$ 10 | 70     |
| Class participation              | 30     |
| Assignments 6×50                 | 300    |
| Total                            | 600    |

Idea Exchange extra points \*\* 15

## Grades will be assigned as follows:

A > 90%, B = 80-89%, C = 70-79%, D = 60-69%, F < 60%.

## **Exams:**

There are two exams in this course that collectively represent 34% of your grade. By their nature, examinations are cumulative and will consist of multiple choice and short answer (coding). Students will have an opportunity to ask questions about the exam prior to each examination. Makeup examinations will be allowed only in cases of documented health or family emergencies or for official, university-sanctioned activities. The instructor reserves the right to use a percentage score of the other examinations to make up for missed examinations. Advanced notification of missing an examination is required. Any uncoordinated absence from an exam will result in a score of 0 for the exam.

## **Assignments:**

To aid in your learning there will be a number of individual computer projects—many of them small program segments focused to reinforce learning and gain insights. Several computer projects will be turned in for grading. Some projects will be considerably more extensive and expansive than others. There are no extra credit projects; however, several of the assignments may provide opportunities to earn extra credit. All projects must be completed and execute. Points will be deducted for programs that do not execute. Assignments are due by midnight on the due date. These assignments may be turned in through Blackboard. For late assignments I will subtract 2/5 of the point total for the assignment for each day it is late. If you have not submitted your homework by the 5th day after it is due, I will not accept it. Assignments will collectively make up approximately 50% of your course grade (300 points).

#### **Quizzes:**

Quizzes make up about 12% of the course grade. There will be approximately 8 quizzes over the semester worth 10 points each and the two with lowest grades will be dropped. Any missed quiz will result in a score of 0 for that quiz and the lowest-grade quiz will be dropped. There are no make-ups for unexcused absences. If you are prepared for class the quizzes should be easy five-to ten-minute exercises.

## **Class Participation:**

Class participation accounts for 5% of the course grade. Participation involves active engagement in in-class programming activities. During most class meetings, we will be working on one or part of one VB.NET application. Everyone is expected to follow the instructions and submit their completed application by the end of the class time. In case of unexpected technology-related complications, applications may be completed and submitted by 8PM the same day. Five random applications will be graded for completion and functionality at the level described in class. The five graded applications will collectively comprise 5% of the course grade.

## \*\*Idea Exchange Extra Points:

The discussion forum on Blackboard will play a particularly important role for your assignments. Software developer communities often seek help from each other through discussion forums. Hence, students will be able to ask questions related to assignments. The forum is only as useful as you students make it. The more students participate in providing responses to posted questions the more everyone benefits.

To encourage your participations in programming-related discussions on Blackboard, you will be awarded up to 15 extra points for your discussion forum activities:

- Each posts that states a valid programming problem: 1 point (max: 5 points total).
- The first post (or otherwise a unique) which explains a correct answer to a problems asked by class members: 2 point (max: 10 points total).

*Important note:* posts are intended to explain problems and solutions without exchanging codes. If you share codes, your posts may not be eligible for extra points.

If you have completed your assignment you may be able to guide your classmates to complete theirs in an effective and timely manner.

*Important note:* everyone is in charge of her/his own learning process. If you receive help via the discussion forum, make sure you understand the logic and details of the solution and that you will be able to complete each step if you are asked to write & run a similar program on the exams.

## **Graduate Students:**

Graduate students taking this class for graduate credit will be differentiated in terms grading and projects (may be required to do an additional project).

## **Important Policies and Notes:**

# **Grade Appeals**

All grade appeals are to be made in writing (email is ok) within 48 hours. You should include your name, the specific item you are appealing, your original response and an explanation why that item should be re-scored (e.g. text page number and quote). This process is designed to document the process and ensure grade equity across the class.

## **Academic Honesty**

As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail.

Each University of Arkansas student is required to be familiar with and abide by the University's "Academic Integrity Policy" which may be found at http://provost.uark.edu/ Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

Application of the Academic Honesty Policy, as stated at http://provost.uark.edu/ will be fully adhered to in this course, and all courses within the Sam M. Walton College of Business.

# **Inclement Weather:**

I will "officially" cancel classes only if the University cancels all classes. Information concerning University closings can be obtained by calling 575-7000 or 575-2000. I will also email everyone (if possible). It is your responsibility to determine if it is safe for you to attend class due to inclement weather. If weather prevents you from attending class, please notify me immediately.

## **Accommodations:**

Any student requiring special accommodation (e.g. disability, religious observance) should contact me as soon as possible so we can work within the university and college guidelines. See http://cea.uark.edu/ for more information. For information concerning religious holidays see http://registrar.uark.edu/945.php. Students who would like to serve as volunteer tutors, readers, or note takers for students needing special assistance are encouraged to contact the instructor during the first week of class.

#### **Disclaimer:**

I reserve the right to deviate from the schedule and any changes to the schedule will be posted on the web. It's your responsibility to remain up-to-date. Additional information about the exams and assignments will be provided in class. The scheduled dates for exams, etc are subject to change, but changes will be discussed in class. Students are expected to attend classes and are responsible for obtaining information from missed classes from other students (including changes to due dates and assignments).

## \*\*Your Feedback \*\*

I believe that the class should provide a learning environment for the students and the instructor. As a junior instructor, to improve the quality of my teaching, I will rely on your feedback to let me know how I am doing in the class. For this purpose we will conduct an Informal Early Feedback in late September and you can share any thoughts, comments, and critiques on my teaching. Of course, I greatly appreciate other forms of feedbacks. You can e-mail me your thoughts or if you prefer to do it anonymously you can send me your feedback by campus mail to my campus address

<u>Tentative Schedule:</u>
A flexible schedule of topics and reading assignments follows. You are responsible for checking the schedule, coming to class prepared, and finding out if assignments were made in case of your absence. The chapters assigned refer to the text, and additional reading may be provided occasionally.

| No | Date               | Topic   | Assignment               |
|----|--------------------|---|--------------------------|
| 1  | Tuesday<br>Aug 23  | Introductions & Course Overview   |                          |
| 2  | Thursday<br>Aug 25 | Chapter 1 – Introduction to Visual Basic<br>Introduce Assignment #1                                 |                          |
| 3  | Tuesday<br>Aug 30  | Chapter 1- Introduction to Visual Basic   |                          |
| 4  | Thursday<br>Sep 1  | In Class Quiz – Chapter 1<br>Chapter 2 – User Interface Design                                      |                          |
| 5  | Tuesday<br>Sep 6   | Chapter 2 – User Interface Design   |                          |
| 6  | Thursday<br>Sep 8  | In Class Quiz – Chapter 2 Chapter 3 – Variables, Constants & Calculations                           | Assignment #1 (11:59 PM) |
| 7  | Tuesday<br>Sep 13  | Chapter 3 – Variables, Constants & Calculations<br>Introduce Assignment #2                          |                          |
| 8  | Thursday<br>Sep 15 | Chapter 3 – Variables, Constants & Calculations   |                          |
| 9  | Tuesday<br>Sep 20  | In Class Quiz – Chapter 3 Chapter 4 – Decisions & Conditions  |                          |
| 10 | Thursday<br>Sep 22 | Chapter 4 – Decisions & Conditions  |                          |
| 11 | Tuesday<br>Sep 27  | Chapter 4 – Decisions & Conditions  |                          |
| 12 | Thursday<br>Sep 29 | In Class Quiz – Chapter 4 Chapter 5 – Menus, Dialog Boxes, Sub Procedures & Function Procedures     | Assignment #2 (11:59 PM) |
| 13 | Tuesday<br>Oct 4   | Chapter 5 – Menus, Dialog Boxes, Sub Procedures &<br>Function Procedures<br>Introduce Assignment #3 |                          |
| 14 | Thursday<br>Oct 6  | Chapter 5 – Menus, Dialog Boxes, Sub Procedures & Function Procedures                               |                          |
| 15 | Tuesday<br>Oct 11  | Midterm Exam  |                          |
| 16 | Thursday<br>Oct 13 | Chapter 6 – Multiform Projects  | Assignment #3 (11:59 PM) |
| 17 | Tuesday<br>Oct 18  | NO CLASS – FALL BREAK   |                          |
| 18 | Thursday<br>Oct 20 | Chapter 7 – Lists, Loops & Printing   |                          |
| 19 | Tuesday<br>Oct 25  | Chapter 7 – Lists, Loops & Printing<br>Introduce Assignment #4                                      |                          |
| 20 | Thursday<br>Oct 27 | Chapter 7 – Lists, Loops & Printing   |                          |

| 21 | Tuesday<br>Nov 1   | In Class Quiz – Chapter 7 Chapter 8 – Arrays & Collections   |                          |
|----|--------------------|--|--------------------------|
| 22 | Thursday<br>Nov 3  | Chapter 8 – Arrays & Collections   |                          |
| 23 | Tuesday<br>Nov 8   | Chapter 10 – Database Applications   |                          |
| 24 | Thursday<br>Nov 10 | In Class Quiz – Chapter 8<br>Chapter 10 – Database Applications  | Assignment #4 (11:59 PM) |
| 25 | Tuesday<br>Nov 15  | Chapter 10 – Database Applications   |                          |
| 26 | Thursday<br>Nov 17 | Chapter 11 – Data Files  |                          |
| 27 | Tuesday<br>Nov 22  | In Class Quiz – Chapter 10<br>Chapter 11 – Data Files  |                          |
| 28 | Thursday<br>Nov 24 | NO CLASS - THANKSGIVING  |                          |
| 29 | Tuesday<br>Nov 29  | Chapter 11 – Data Files  | Assignment #5 (11:59 PM) |
| 30 | Thursday<br>Dec 1  | In Class Quiz – Chapter 11 Chapter 12 – OOP: Creating Object-Oriented Programs Introduce Assignment #6 |                          |
| 31 | Tuesday<br>Dec 6   | Chapter 12 – OOP: Creating Object-Oriented Programs  |                          |
| 32 | Thursday<br>Dec 8  | Chapter 12 – OOP: Creating Object-Oriented Programs  |                          |
| 33 | Tuesday<br>Dec 13  | <b>Final Exam:</b> 3:15-5:15PM   | Assignment #6 (11:59 PM) |