

GEORGIA COLLEGE & STATE UNIVERSITY COURSE SYLLABUS

Advanced Programming

Semester:	Fall	Year:	2010
Course Title:	Advanced Programming	Course #:	CBIS 4210
Instructor:	Dr. Bryan Marshall	Office:	ATK 305
E-Mail:	bryan.marshall@gcsu.edu	Hours:	TR 8:30 – 11:00 am or by appointment
Phone:	478-445-2137		
Class Time:	TR 11:00-12:15 pm		
Classroom:	ATK 308		

Catalog Description

Prerequisite: CBIS 3212. This course employs an object-oriented language in the development of object-oriented systems. Students gain knowledge and experience in building business applications, system analysis design, and group projects. The building of applications supported by databases is also covered.

Topics Covered

Sub procedures, Functions, Arrays, Sequential File Access, String Manipulation, Error Catching, Database Connections, and Database Queries.

Course Outcomes

Students should be able to:

1. Design and develop business applications using an object-oriented computer language.
2. Demonstrate a thorough knowledge of variables, constants, floating point numbers, and arithmetic operators within the chosen language.
3. Demonstrate the ability to employ arrays, strings, and other object structures within the chosen language.
4. Demonstrate a thorough knowledge of the concepts of objects and classes.
5. Demonstrate a thorough knowledge of how to program input, output, and file devices within the chosen language.
6. Build effective graphical interfaces within the chosen languages.

Required Text

Clearly Visual Basic: Programming With Microsoft Visual Basic 2008, Diane Zak, (2009)
ISBN13: 9781423902416

Grading

Homework (8 Assignments)	40%
Final Project	30%
Midterm Exam	15%
Final Exam	15%

WebCT

The class is available on WebCT at <http://vista.gcsu.edu> Students are held responsible for class information contained in WebCT. A copy of the class syllabus is available on <http://bryanmarshall.com>

Fire Drill Procedures

In the event of a fire signal students will exit the building in a quick and orderly manner through the nearest hallway exit. Learn the floor plan and exits of this building. Do not use elevators. Crawl on the floor if you encounter heavy smoke. Assist disabled persons and others if possible without endangering your own life. Assemble for a head count.

Requests for Modifications

Any student requiring instructional modifications due to a documented disability should make an appointment to meet with the instructor as soon as possible. An official letter from GCSU documenting the disability will be expected in order to receive accommodations.

Withdrawals

The last day for withdrawal without academic penalty is **October 14**.

Attendance Policy

Class attendance is extremely important to succeed in this course. Attendance is mandatory, meaning that you are expected to attend each class period. However, the professor understands that there will be times when personal issues are unavoidable and take priority. Therefore, each student will be allowed three (3) excused absences without penalty. Since students are allowed three excused absences, there is no need to contact the professor to explain an absence. If you are absent, it is your responsibility to obtain missed material from your peers, so establish contact with other students in the class immediately.

If for any reason more than three absences occur during the course of the semester, the student will receive a negative adjustment of one full letter grade. This means that if you have three excused absences from a physician and one unexcused absence you will receive a full letter grade reduction.

Attendance will be taken on random days and will be influenced by the “prisoner’s dilemma” game theory approach. This means that I am much more likely to take attendance when there are fewer students in attendance, and much less likely to take attendance if all students are present. Classes will start on time and you are expected to be at your seat at the beginning of class. You are in attendance when your name is called. If you are not in your seat when attendance is taken, you will not be given attendance for that day. If you need to leave class early, which I don’t recommend, you are required to notify me at the beginning of class. Failure to do so will result in the loss of attendance for that day.

Homework Policy

Homework is expected to be completed *individually*. I do **NOT** accept late work. Once homework has been collected, I will **NOT** be accepting any late work. This means you need to be on time to class the day homework is due. If for **WHATEVER** reason you cannot turn in your homework, you need to notify me **PRIOR** to when the homework is due, however, I assign homework so far in advance, there are very few excuses I will be willing accept as to why you cannot turn in your work. **COMPUTER failure** is not a valid excuse.

THE FOLLOWING COURSE OUTLINE PROVIDES A GENERAL PLAN FOR THE COURSE. DEVIATIONS MAY BE NECESSARY.

DATE	LECTURE
Aug 17	Intro to Class / Syllabus
Aug 19	Review – For Next Statements
Aug 24	Review – Nested Repetition Structures
Aug 26	Review – Database
Aug 31	Database I – Connection & Add, Edit, Delete
Sep 2	Database I – Connection & Add, Edit, Delete
Sep 7	Database II – SQL Queries using LINQ
Sep 9	Database II – SQL Queries using LINQ
Sep 14	Sub Procedures
Sep 16	Sub Procedures
Sep 21	Functions
Sep 23	Functions
Sep 28	One Dimensional Arrays
Sep 30	One Dimensional Arrays
Oct 5	
Oct 7	Lab Day (IACIS Academic Conference)
Oct 12	Fall Break
Oct 14	Midterm Exam
Oct 19	Parallel One-Dimensional Arrays
Oct 21	Parallel One-Dimensional Arrays
Oct 26	Two-Dimensional Arrays
Oct 28	Two-Dimensional Arrays
Nov 2	Sequential File Access
Nov 4	Sequential File Access
Nov 9	String Manipulation
Nov 11	String Manipulation
Nov 16	Error Catching
Nov 18	Error Catching
Nov 23	
Nov 25	Thanksgiving Break
Nov 30	
Dec 2	Final Project Due
Dec 8	Final Exam (11:00-1:45 pm)

Homework

Due

Sub procedures	September 7
Functions	September 14
Arrays	October 5
Sequential File Access	October 14
String Manipulation	October 28
Error Catching	November 4
Database Connections	November 11
Database Queries	November 18