COP 2010
Introduction to Visual and Procedural Programming
(3 Semester Credits)

Instructor: Karthikeyan Umapathy
Office location: Mathews (15/ 3214)
Phone: 620-1329 (office)
Email: k.umapathy@unf.edu

Catalog Description:
This course provides an introduction to the fundamentals of visual programming as well as procedural language structure and capabilities. Students learn about visual programming development, including problem definition, problem solving and algorithms, procedures, controls, arrays, structures, coding, visual interface design, testing, and debugging.

Prerequisite or Co-requisite:
CGS 1570 - Microcomputer Application Software

Course Objectives/Learning Outcomes:
- Understand concepts of procedural programming such as sequence, selection, and repetition.
- Learning concepts of event-driven programming.
- Understanding basic ideas of object-oriented programming such as encapsulation, polymorphism, inheritance, and object hierarchies.
- Implementing Visual Basic projects to solidify these ideas.
- Utilizing good programming practices for ease of maintenance such as eliminating duplicate code and avoiding jump statements.
- Learning how to modularize using subroutines and functions.
- Handling exceptions to create robust programs.
- Working with data structures such as numerical and parallel arrays and confirming the concept of collections with list boxes and strings.
- Understanding aspects of human-machine interaction via a visual interface.
- Learning basic relational database concepts and the connection between the interface to a database including the use of bound controls.

Method of Teaching:
Lecture, in-class activities, and outside programming assignments

Textbook and other sources:
Programming in Visual Basic 2010: The Very Beginner's Guide
Authors: Jim McKeown
Publisher: Cambridge University Press
ISBN: 9780511686832

Method of Evaluation:
2 Exams of 20% each (40% total)
5 Assignments of 10% each (total 50%)
Class participation (5%)
In-Class assignments (5%)

Letter grades will be based on:
94 – 100 = A
90 – 93.99 = A-
87 – 89.99 = B+
84 – 86.99 = B
80 – 83.99 = B-
77 – 79.99 = C+
70 – 76.99 = C
60 – 69.99 = D
less than 60=F

The penalty for cheating on an exam or assignments will be F grade in the course. Work which is similar beyond coincidence will automatically be considered cheating by all parties.

Late Assignments:
There will be a penalty of 10 % per day for late submission of assignments (including weekends and holidays). No credit will be given for work turned in more than one week late. No partial credit will be given for assignments which are not producing reasonable output.

Exam policy:
Each student is required to take all exams at the scheduled times. All exceptions must be cleared with the instructor prior to the exam time. Exams missed for insufficient reason or without being cleared with the instructor prior to the exam time will be assigned a score of zero.

Academic dishonesty:
No type of academic dishonesty will be tolerated. If you are caught cheating (on the assignments) the punishment will be the most severe penalty allowed by the university policy. The policy on academic integrity and misuse of computer equipment and computer accounts found at http://www.unf.edu/ccec/computing/Policies___Guidelines.aspx applies to this course.

Other remarks:
- A grade of incomplete will not be given except for catastrophic illness or calamity.
- All university rules regarding classroom behavior and attendance apply.
- Assignments for extra credit will not be assigned. If you do not complete an assignment by the date assigned, no make-up assignment will be provided and you will receive a score of zero for that assignment.
- Attendance is expected. If a student misses a class, the student is still responsible for the material that is covered and for completing any assignments by the due date that may have been handed out by the professor in class.

Course Topics

It is expected that the student will read the chapter assigned prior to the class meetings and will have questions for the instructor on any topics the student is not sure of, or does not understand. The student is responsible for all topics presented in the text regardless of their coverage. In addition, the students will be responsible for all lecture material that is not included in the text.

Week	Topics	Chapters	Assignment Dues
1	Course introduction and Fundamentals of Programming	Chapter 1	
	Introduction to Visual Basic 2010		
2	Variable and Constants	Chapter 2	
3	Writing and Debugging Programs	Chapter 3	
			Assignment 1
4	Controls and Logics	Chapter 4	
5	Decisions	Chapter 5	
			Assignment 2
6	Loops	Chapter 6	
7	Procedures and Functions	Chapter 7	
			Assignment 3
8	Exam Review	Chapters 1-7	
			Exam I
9	User Interface Components	Chapter 8	
10	File Handling	Chapter 9	
11	Arrays	Chapter 10	
			Assignment 4
12	Event Handling	Chapter 11	
13	Object and Classes	Chapter 12	
14	Database	Chapter 14	
			Assignment 5
15	Exam Review	Chapters 8-12 and 14	
			Exam II

Please Note

Instructor reserves the right to modify course to meet the student's needs.

Students with Disabilities

Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in Honors Hall, Building 10, Room 1201. DRC staff members work with students

to obtain required documentation of disability and to identify appropriate accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and if so, the accommodations the student requires will be provided. DRC staff then will prepare a letter for the student to provide faculty advising them of approved accommodations. Military and veteran students who return from combat exposure may be utilizing the post-9/11 GI bill to continue postsecondary education goals. For further information, contact the DRC by phone at (904) 620-2769, e-mail (kwebb@unf.edu), or visit the DRC website (http://www.unf.edu/dept/disabled-services). Military and veteran students may need both physical, emotional, and academic accommodations. Contact Cindy Alderson, director of Military and Veterans' Resource Center, by phone at (904) 620-2655 or by e-mail at cindy.alderson@unf.edu.

Satisfactory Progress Policy

The School of Computing enforces the "one repeat" rule for all prerequisite and core courses offered by the School for its major programs. Students who do not successfully complete a prerequisite or core requirement for a School of Computing course on the first attempt (i.e., earn a grade of D, F, W, WP or WF) will be granted one chance to repeat the course. Students who do not successfully complete a prerequisite or core requirement within two attempts will not be permitted to register for courses offered by the School in future semesters. This stipulation applies whether or not the student has declared a major in a School of Computing program.
http://www.unf.edu/ccec/computing/PoliciesGuidelines/Satisfactory_Progress_Policy.aspx

Community-Based Transformational Learning

Community-Based Transformational Learning is about providing students with first-hand experiences that take them outside the walls of the classroom and into the community. By engaging in these activities, UNF students learn how to translate theory into practice, strengthen their sense of civic and ethical responsibility, and gain from professional and career development opportunities. In many cases, these experiences transform the lives of students.
(http://www.unf.edu/ccbl/What_is_Community-Based_Transformational_Learning.aspx)