ACU COLLEGE OF BUSINESS ADMINISTRATION
COURSE SYLLABUS
INTRODUCTION TO PROGRAMMING (CS 140.01)
SECTION 1, TWRF 8:00-11:55 AM
MAY SEMESTER 2009

Competence
Character
Community

Instructors:	Orneita Burton, PhD	**Office: BA 243**
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Classroom: **Lecture & Lab**– Mabee Business Building (COBA) – TWRF MBB302

"To create a distinctively Christian environment in which
excellent teaching, combined with scholarship,
promotes the intellectual, personal, and spiritual growth of business students,
and educates them for Christian service and leadership
throughout the world."

The COBA Mission Statement

Course Description and overview: *Introduction to Programming* provides an introduction to the computer as an information organizing and manipulating tool while considering its responsible use in the environment. This course presents an overview of computer science and programming concepts by providing an initial introduction to hands-on topics such as computer hardware and software, programming and software development, followed by more abstract topics such as algorithm complexity and data structure fundamentals. Specific topics include computer design and construction, data storage and manipulation, control structures, debugging, database programming, and software engineering. Familiarity with word processors and web browsers is assumed (3 credits).

Contribution of Course to Overall Business Perspective: This course provides an introduction to computer science that is foundational to further studies in information systems (IS) and information technologies (IT). By offering an overview of computers as an integral part of existing systems, the student better understands the intricacies of the proper design and use of computers.

Contribution of Course to the Development of Communication Skills: This course is structured to develop both written and oral communication skills. Small group projects are designed to provide real-life experiences in group interaction by using effective communications to produce professional business outcomes. Weekly written essays and assignments will lead to proficiency in common business communication skills and emphasize the importance of faithful commitment and participation in group activities.

Contribution of Course to Christian Service and Leadership: An education for Christian service and leadership means learning to deal successfully with people and to use skills, technology and opportunities to help promote full lives for ourselves and others. In this class, we study some of the basic issues in the use and understanding of computer technology. Concurrently, we will be concerned about the impact of information technology on life and society. In doing so, we will learn how individuals leading Christ-centered lives can effectively use their knowledge and skills to foster the well-being of others as inspired by our faith.

"Now it is required that those who have been given a trust must prove faithful." 1 Corinthians 4:2

Goals for Student Competency: The goal of this class is to prepare the student to understand the function and limits of computer technology in current society. Students will be introduced to the tools, techniques, and methodologies used to analyze, design, and implement enterprise level information systems. For those who plan to major in computer science, this course will provide a foundation for later studies in information technology. For students with business and other majors, this course will provide basic programming skills and an understanding of the issues that should be considered in the design and use computer applications in business processes.

Format: Class time will be spent in the discussion and practice of programming concepts and the research of problems and new technologies involved in computing and computer use. Weekly class time will be allocated to lab activities to introduce computer applications and complete projects where students will interact with peers to develop assignments.

Some of the important technologies used in this course include:

- Microsoft Word – Reports and essays
- Microsoft Excel – for Visual Basic programming
- Microsoft Access - Database management systems (DBMS) & programming
- Microsoft Visio – Graphical tool, GUI development
- Visual Studio - Integrated Development Environment (IDE) and Programming tool

In addition to the technical content and technologies described above, students will also improve their written and oral communication skills as they learn how to prepare, write and present the necessary technical documentation to support assigned projects.

The class schedule (assignments) will be posted on the class web site. The instructor may deviate from the schedule if necessary; however, any such changes will be announced in-class and posted on the class web site. The topics covered in this course may be difficult to grasp without a reasonable amount of effort put forth by the student. Students will need to dedicate time outside of class for activities, lab exercises, readings, and written assignments.

Prerequisites: No course prerequisites are required. However, students should be familiar with word processors and web browsers.

Course Materials:
Text (Required):
Boehm, Anne. (2008). *Murach's Visual Basic 2008*
> Publisher: Mike Murach & Associates, Inc.
> ISBN: 978-1-890774-45-5

Supplemental Text (not required):
Shepherd, Richard. (2006). Excel VBA Macro Programming
> Publisher: McGraw-Hill
> ISBN: 0-07-223144-0

Software: All software required to complete assignments will be available in the lab.

Course Policies/Assignments
Class Attendance: Class attendance is necessary to achieve the maximum benefit from this class. Attendance requires that students arrive on time and stay for the entire class. Excessive absences will affect a student's course grade. Students are expected to attend every class. Excessive absences may result in extra assignments to compensate for the missed classes and/or a lowered course grade.

If a student is unable to attend class for any reason, they should notify the instructor as soon as

possible by email. University policy requires that a student provide seven (7) days advanced written notice of all approved absences. The activity sponsor is responsible for providing the appropriate signed form in a timely manner. For an unanticipated absence to be excused, the student must contact me before the next class period. The student should also contact one of their classmates to review what was discussed in class. **Students with more than two unexcused absences will be dropped from the class.**

Tardiness: 3 tardies are treated as 1 absence

In-Class Participation – written essays: The format of this class requires good critical thinking and communication skills. To build these skills, students are expected to attend class and actively participate in the class discussion. To enhance the discussion, students will be required to review **two news topics each week** in computer science, programming, or information technology that is related to the assigned topic and submit a one-half to one-page essay that summarizes the topic. Students will be selected **by random draw** to orally present their research as submitted in their written essay. Students will not be allowed to reschedule a missed presentation. Participation grades will be recorded and adjusted based on the student's presence/absence and level of preparedness.

Individual Projects: Four individual projects will be assigned during the semester that will require students to apply what they have learned in lab and in class. Some project assignments will be completed in class while others must be completed outside of class. Project assignments will be due as specified by the instructor and as published on the class blackboard site**.**

All essays and written assignments will be graded as follows:

1. **Completeness:** Degree of completion of all assigned work.
2. **Correctness:** The accuracy of the submission.
3. **Grammar and Spelling** (as appropriate)
4. **Documentation:** Proper documentation and format as outlined in-class.

To be fair to everyone, a student must submit all assignments at the beginning of class when the assignment is due, in order for it to be considered on time. For each day in which a project assignment is late, the project assignment will be graded down by 5 % up to a maximum of one week (seven days). Project and lab assignments will not be accepted after three days. **Homework assignments will not be accepted late.** This policy will be strictly enforced as it promotes students coming to class.

Grading

Grades for this class will be assessed based on class assignments as outlined above. Students must complete all course assignments or the instructor may assign a grade of F. Grades will be assigned based upon 90+ is an A, 80 - 89.9 is a B, 70 - 79.9 is a C and 60 - 69.9 is a D, below 60 is an F.

Daily In-Class Lab Assignments:	300 pts	30 %
Weekly essays (6, equally weighted):	240 pts	24 %
Individual Projects (4):	160 pts	16 %
Exams (3):	300 pts	30%
Total:	1000 pts	100 %

Final grades will also be adjusted for attendance as follows:
  0 – 1 absence: No adjustment
  Greater than 2 unexcused absences: Dismissal from class

Academic Integrity: The university catalogue states that "ACU expects its students to practice absolute

academic integrity. Plagiarism, cheating, and other forms of academic dishonesty are not acceptable at ACU." The main point of this policy is that all individual work assignments (non group work) should represent the student's individual work. Turning in another student's work is considered academic dishonesty and will result in no credit being given for the assignment. Penalties can also include receiving a grade of F for the course and recommendation for immediate suspension from the university.

The following actions are also considered inappropriate conduct:

- Providing or accepting assistance on quizzes and examinations (cheating by any method or means, including sharing information between class sections).

- Behaviors which are disruptive, which are insensitive, or which directly or indirectly inhibit others from working toward their academic goals.

- Behaviors which are disrespectful to classmates or to the instructor.

- Submitting work derived by another student or preparing work for another that is to be used as that person's own work. Using work of another constitutes plagiarism. Evidence of shared work will result in a grade of zero for all parties involved.

- Lying to your instructor to receive a better grade or submit a late assignment is considered an ethical breach of conduct.

Violations of academic integrity involve the intention to deceive or misrepresent and are therefore a form of lying. Such actions are contrary to the behavioral norms that flow from the nature of God. Therefore, alleged violations will be subject to the conditions as outlined in the academic integrity policy enforced by the university. Although the university enforces the policy, the most powerful motive for integrity and truthfulness comes from one's desire to imitate God's nature. Every member of the faculty, staff, and student body is responsible for protecting the integrity of learning, scholarship, and research. Please read the COBA honor code at: http://www.acu.edu/academics/coba/currentstudents/cobahonorcode.html. The full university policy is available for review at the campus life website: http://www.acu.edu/campusoffices/campuslife/acad_integrity/index.html

In summary, students are expected to make an ethical and moral commitment to act appropriately in all academic activities and to not tolerate any dishonorable behavior on the part of other students. **Any breach** of academic dishonesty may result in **removal from** this **class**.

Examinations: Two semester exams and a final exam will be administered during this course as outlined in the class schedule. Exam questions may include short answer questions, programming and problem solving as well as traditional exam questions. All exams will be closed book.   If a student misses an exam, the instructor will need a documented, excused reason to offer a make-up test. Make-up exams or will be given only in extreme circumstances, when the instructor has determined that the absence is valid and necessary. Make-up exams will be administered at the discretion of the instructor.

Final Exam: The final exam for this course will be offered on **Friday, May 29, 8:00-11:45 AM**. All students must take the exam at the time assigned for our class.

Contesting Grades: Students will have three (3) days after a grade is assigned to contest the grade received. Requests must be submitted in writing (not by email) and provide reasonable justification for the change request. Grade changes **will not** be considered after this period.

Administrative Comments:
1) Refer to the Registrar's site for pertinent enrollment/withdrawal dates. To drop a course, you must complete the required paperwork with your advisor.
2) You must earn a grade of C or better in this course in order for it to satisfy the pre-requisite requirement for any course for which this course is a pre-requisite.

Summary of Daily Assignments:
A summary of the class schedule is shown below and can also be found on the course

blackboard site. **This schedule can be amended as needed; changes will be announced in class.**

Note: *Weekly Essays are due on Tuesdays and Thursdays at the beginning of class.*

Subject to change with notice – last updated on: May 5, 2009

Week and Date	Topic	Assignments Due	Exams & Supplemental Readings
	Computer Science		**Excel VBA**
1-5/12	Introduction to Programming, Visual Basic CS Concept: Data Storage		VBA Ch1
1-5/13	Introduction to Visual Studio CS Concept: Algorithms Variables, Arrays, Constants, & Data Types	VB Ch1-3 Essay 1	VBA Ch2
1-5/14	Variables, Arrays, Constants, & Data Types Control Structures	VB Ch1-3 Project 1 assigned	VBA Ch3
1-5/15	Data Manipulation & Control Structures Debugging	VB Ch4 Essay 2	VBA Ch7 **Exam No. 1**
2-5/19	CS Concept: Programming Languages Control Structures	VB Ch5 Essay 3 Project 1 due	VBA Ch.4
2-5/20	Procedures and event handlers	VB Ch6	VBA Ch.7, 8
2-5/21	Exception Handling and data validation Strings & Functions	VB Ch 7 Essay 4 Project 2 assigned	VBA Ch.5
2-5/22	Arithmetic Operators Arrays	VB Ch8, 9	VBA Ch6 **Exam No. 2**
3-5/26	CS Concept: Classes & Objects	Essay 5 Project 2 due	VBA Ch12
3-5/27	Software Engineering Visio	VB Ch9, 10 Project 3 in class	
3-5/28	Data Structure Fundamentals Database Systems & Programming	VB Ch13, 14 Essay 6 Project 4 assigned in class	
3-5/29	Summary & Final	Project 4 due	**Exam No. 3 - Final**
FINAL EXAM – FRIDAY, 5/29, 8:00-11:45 AM			