CS 233: Application Program Development

Course Description:
Application program development emphasizes software development with the use of integrated development tools, software development kits, and software subsystems to develop database and eCommerce applications. Learning activities include classroom presentations and discussions, laboratory, and online tasks to develop the knowledge and skills necessary to write effective computer programs for information system applications.

Audience:
Students planning to enroll for this course should have mastered the objectives set for an introductory course in computing including the fundamentals of programming (e.g. CSci 151).

Student Learning Outcomes*:
1. Acquire the skills to edit, test and implement software for a client-server environment;
2. Develop programs to retrieve data from forms and files to produce user displays and reports;
3. Learn programming constructs and develop programs that use strings, dates, arrays, functions, classes and objects;
4. Design and develop user interfaces to collect and present data and information;
5. Develop code to use regular expressions, handle exceptions and validate data for file and database storage;
6. Implement measures to create secure web sites;
7. Design, create, and process a database;
8. Design and develop pages for a typical web application (e.g. shopping cart).
* As measured by exam, quiz, and lab assignment results

References and Materials:
2. PHP, MySQL and Apache webserver are free for academic use and may be downloaded from php.net or mysql.com or as a package from apachefriends.org.
3. A usb/flash drive for storing files and software.

Measurement and Evaluation:
Grades will be based upon points earned on quizzes (100 points), labs (100 points) and the final exam score (100 points). A point total in the range of 270-300 will earn the grade "A", 240-269 a "B", 210-239 a "C" and so on. College policy must be followed to obtain an "X" (incomplete). Unless circumstances are beyond control, the student is expected to withdraw instead of delaying completion of the course.
Class Policy, Procedure and Rules

Assigned Readings:
The student is expected to read assignments to prepare for scheduled discussions and applications of the material.

Attendance:
Regular class and/or online participation should ensure that expectations are understood, and provide feedback to monitor and assess progress. The student is responsible for accessing the course website for announcements and to obtain assignments and related materials.

Participation:
The student is expected to take part in class or online discussions, implement and test software and program examples, and assist classmates with technical issues.

Lab Assignments:
It is expected that the student will begin each project when assigned or as topics are approved, then present system components by the scheduled progress reporting dates. If an assignment is not completed by the due date, the next assignment grade will count for itself and its predecessor.

Quizzes and final exam:
The student is expected to complete quizzes and the final exam as scheduled. If a graded activity is missed, the next score will be substituted. Quizzes are based upon announced exercises. The final exam is based upon all learning objectives to be reached before the scheduled date.

Intellectual Honesty:
By departmental policy, the discovery of plagiarism (i.e. copying from another's quiz, exam paper or lab) will result in a grade of "F" on that particular activity. A subsequent breach of this policy mandates a grade of "F" for the course.

Conduct:
"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (re Student Handbook)". Based upon revised university policy, smoking or tobacco use of any type is prohibited in or near the classroom.

Special Accommodations:
Students in need of accommodations for disabilities should contact the Director of Disability Resources and Services, Gee Library, Room 132, phone 903.886.5150 or 5835.

Non-Discrimination:
A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.