

Mr. James Scott  
class meetings: 11:00 Mon & Wed in BA 244  
conference: 10:30 Mon & Wed Location TBD  
Email: scottjf1968@gmail.com  
CS 233: Application Program Development

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Fall 2015

### **Course Description:**

Application program development will cover the full life cycle of program development from requirements review, design, implementation, testing, integration and demonstration. The use of integrated development tools, software development kits, and software subsystems will be used to develop a database enabled web based application. In addition to the course text book study, learning activities will include:

- reviewing a requirements document,
- create a design document,
- implementing a MySQL database with tables defined in the design document,
- developing a web based application that connects to the MySQL database,
- extensive application integration and testing to confirm requirements are satisfied,
- and a short demonstration to “sell off” the product.

### **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\*:**

Develop an understanding of the full life cycle of application development;

Acquire the skills to edit, test and implement software for a client-server environment;

Develop programs to retrieve data from files and forms to produce user reports and displays;

Learn programming constructs and develop programs that use strings, dates, arrays, functions, classes and objects;

Design and develop user interfaces to collect and present data and information;

Develop code to use regular expressions, handle exceptions and validate data for file and database storage;

Implement measures to create secure web sites;

Design, create, and process a database;

Design and develop pages for a typical web application

\* measured by quiz, exam and lab project results

### **Measurement and Evaluation:**

Final grades will be based upon:

Quizzes and daily assignments	10%
Requirements review and design document	10%
Database design and implementation	10%
Web Application	20%
Demonstration	10%
Mid-term Exam	20%
Final Exam	20%

**References and Materials:**

1. Murach, Joel. Murach's PHP and MySQL 2ed. Mike Murach & Associates, 2015, isbn 9781890774790.
2. PHP and MySQL software (and associated documentation) is free for academic use and may be downloaded from [apachefriends.org](http://www.apachefriends.org). See the FAQ: [https://www.apachefriends.org/download\\_success.html](https://www.apachefriends.org/download_success.html)  
Also, a "zip" file may be the most portable implementation so for usb flash drive users try <http://bit.ly/14idYDv>)
3. A usb flash drive for storing files and software would allow you to develop at multiple locations (e.g. on your laptop and also at a lab desktop).

## Class Policy, Procedure and Rules

### Assigned Readings:

The student is expected to complete reading assignments to prepare for practice exercises, assignments and scheduled discussions of the material.

### Attendance:

Attending face-to-face class meetings and/or online participation should ensure that expectations are understood, and give feedback to monitor and assess progress. The student is responsible for accessing the course website to obtain assignments and related materials.

### Participation:

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

### Lab assignments:

It is expected that the student will begin each project when assigned, then submit system components by the scheduled reporting dates.

### Exams:

The student is expected to complete the exams as scheduled. They will be based upon all learning objectives to be reached before the scheduled dates. These exams are to be monitored at a test site.

### Intellectual Honesty:

By departmental policy, the discovery of plagiarism (i.e. copying from another's lab assignment or exam paper) will result in a grade of "F" on that submission for an individual grade. 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." (Student Handbook).

### 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 email [StudentDisabilityServices@tamuc.edu](mailto:StudentDisabilityServices@tamuc.edu).

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.