

Course Catalog Description

Building on fundamentals of structured and object-oriented programming, this course covers client and server side scripting languages and a SQL database management system. Students will use open source software tools to develop database-enabled web applications.

Rationale

This course enables students to understand and develop proficiency in some of the basic technologies used to implement applications with Web browser user interfaces and server-side processing.

Course Objectives

The student will be given the opportunity to:

1. Describe issues related to the design and implementation of network-enabled information systems.
2. Describe the functionality of some common server-side web application technologies.
3. Demonstrate proficiency in implementing those technologies.

Course Prerequisite

A grade of "C" or better in Programming Fundamentals (IT 108) or Introduction to Computer Programming (CS 112) realizing that a "C-" or lower in the prerequisite course does not satisfy the requirement.

The prerequisite course must be completed prior to, not concurrently with, this course. If you have questions about this policy, please contact the Instructor so that problems can be avoided later on (such as being dropped from the course).

Textbook

Gosselin, Don. PHP Programming with MySQL, Thomson Course Technology, Boston, MA, 2006.

Readings

Readings for each unit of this class are listed on the Course Schedule found on the Blackboard Learning System (described below). You will be expected to complete reading assignments before going to class. Additional reading materials may be assigned as the semester progresses or if the Instructor finds something particularly relevant to an upcoming topic.

Accounts

- Blackboard Learning System [Blackboard] (courses.gmu.edu): This is set up by the staff in the Instructional Resource Center, and is necessary for our class. Your username and password correspond with your university email account. If you need an account or are having problems accessing your account please contact the Instructional Resource Center (irc.gmu.edu)
- Helios Server and Zeus Database Accounts: Enrollment in the course automatically grants you a server account and makes you eligible to sign up a database account. You can sign up for (and reset) your database account at access.ite.gmu.edu. If you enroll in the course after the semester has started you may need to request a server account by sending an email to Matthew Lilius (mlilius@ite.gmu.edu) with the course name/number, section and server name (Helios).

Communication

Communication and course changes may be discussed in the class, so attendance is strongly recommended.

General communication, course materials, and grades will occur through the Blackboard with our conference for this course being 'IT-207 - IT-207-### YYYYTT', where ### is the section in which you are enrolled, YYYY is the current year, and TT is the current term. All course materials that are provided will

be in Adobe Acrobat (.pdf) or Microsoft Word (.doc) format. If you need to download any information from the course, you should do this on an ongoing basis, and definitely before the course is over. You are expected to check your university email and the course conference regularly.

Instructors, staff, and Teaching Assistants will take care to protect the privacy of each student's scores and grades. Communication on issues relating to the individual student should be conducted using email, phone/messaging, or in person. Email is the preferred method. You should not use the discussion forums on Blackboard for this purpose. Additionally, the Instructor will not discuss issues relating to an individual student with anyone without a need to know (including family members and other students) without prior written permission of the student. Under no circumstances will a student's graded work be returned to another student.

Course Requirements

To complete the course successfully you must complete lab assignments, a project, and participate in class discussions (attendance is not participation). Each component of the course is weighted as follows:

Component	Weight
Participation	10%
Quizzes	35%
Lab Assignments	35%
Project	20%

If you are encountering difficulty in meeting course requirements, or should some dire circumstance arise, it is important you are proactive in contacting the Instructor prior to the due date. Potential problems can be minimized with a simple email. Delay in bringing your circumstances to the Instructor's attention will substantially decrease the likelihood of receiving a favorable outcome.

In order to assess your progress in the course, mid-term reports will be calculated using the quizzes and lab assignments graded to that point. Mid-term grades will be posted to PatriotWeb (patriotweb.gmu.edu) between the 5th and 8th week of the course. These grade reports do not become part of the student's official or unofficial record or transcript and are not used as part of a calculation of GPA.

The deadline for a selective withdrawing from a course with a W grade is the end of the 9th week of the semester (however it is proportioned to be shorter during summer session offerings). Forms do not need dean's approval and may be obtained from your department office. Completed forms should be returned no later than Friday of that week. After that date, a grade will be assigned based on the work that you have submitted. You are allowed three selective withdrawals during your entire undergraduate career at the university.

Final averages are assigned a letter grade according to the following ranges:

Percentage	Grade	Courses
[97, ∞)	A+	Passing
[93, 97)	A	
[90, 93)	A-	
[87, 90)	B+	
[83, 87)	B	
[80, 83)	B-	
[77, 80)	C+	
[73, 77)	C	
[70, 73)	C-	Conditional
[60, 70)	D	Passing
[0, 60)	F	Failing

In general, Conditional Passing letter grades are considered passing for undergraduate courses. However, a Passing letter grade is required in the BSIT program for any course that is a prerequisite for one or more other courses. This course is a prerequisite for Web I: Introduction to Web Development (IT 331).

Final grades will be posted to PatriotWeb, and will not be emailed or appear on Blackboard. A student with a 'hold' on their academic account will be unable to access final grades until the hold has been removed by the Registrar.

University policy states that you have one regular semester to question a grade. After that time has passed a grade cannot be changed.

Class Lectures

Class time will be spent on clarification, amplification, and review of material through the use of slides and examples. Lecture slides are complements to the lecture process, not substitutes for it. Class time is an excellent time for you to ask questions and get additional examples and explanation of any ideas that are still unclear to you.

In order to keep an environment conducive to learning, disruptions should be kept at a minimum. Social discussions and electronic devices are potential distractions in the classroom environment. Cell phones, pagers and other handheld devices must be turned off or set to 'silent' mode and not used while class is in session. Classroom computers and personal electronics may be used only if such use is directly related to the classroom activity in progress. For some activities the Instructor may ask that such devices not be used in order to maximize student engagement. Any student who negatively impacts the opportunity for other students may be asked to leave the classroom.

Participation

Students are expected to attend each class, to complete any required preparatory work, and to participate actively in lectures, discussions and exercises. Active participation will take the form of questions, feedback, analysis, information, and examples all in support of the class' exploration of the topics, reading, and assignments. As members of the academic community, all students are expected to contribute regardless of their proficiency with the subject matter.

It should be understood that the grade for participation is subjective. This means that there are no concrete rules for exactly what constitutes full participation. A well thought out statement will always be more useful than discussions that stray significantly from the topic at hand.

In addition, a discussion forum has been set up on Blackboard for the classes use. It is suggested that you set aside a number of time periods each week to review and participate in the course discussion forum. Go to the topic discussions regularly and read the code updates, questions, comments, and feedback that others have posted. Identify any issue, example, or point you can make that might add value to the thread. Write your contribution directly in a Blackboard message. Postings should only address one issue. Rely on each other to feed the conversation threads rather than the Instructor, who will only be acting as a moderator. Since participation is a major part of both your and others success, it is expected that multiple postings should be made, possibly each week (information, questions and/or answers).

If you are having difficulties understanding topic areas, have additional information to share from your personal experiences, or are having coding problems, the discussion forums are the place to post this information. Even though attempts have been made to correct code errors in the books, errors throughout code is normal. You are encouraged to post the errors you find in the books with corrections and help others with problems they may post concerning using the various environments, understanding the statements in the language, understanding programming concepts, understanding the intent of the assignments, and locating bugs in your assignments and project. While you can provide similar coding examples to address a question a student asks, you must not provide solutions or provide code for any other student's assignment or project. The examples should only guide the student toward resolving a

bug, not provide a solution to a bug. Providing solutions, etc. are considered collusion, a form of academic dishonesty.

Participation will be evaluated by its quality as well as its frequency; however quality is much more important than quantity. Participation contributions are based on the following criteria:

- Thoughtfulness
- Usefulness
- Thoroughness
- Clarity

Quizzes

Quizzes will be used to evaluate your mastery of terms and concepts along with the successful application of those terms and concepts. You should prepare for quizzes by understanding the material presented in class and doing the Review Questions at the end of each assigned chapter in the text. To complete these quizzes you will not be allowed to use your notes, text, etc. Quizzes are retained by the Department of Applied Information Technology and are not returned to students however grades are posted on Blackboard.

Anticipated quizzes dates are shown on the attached schedule. As quiz answers may be reviewed, requests to take quizzes at a different time will not be honored except in exceptional circumstances, such as a documented medical excuse, a serious family emergency, or scheduled university-approved off-campus event, and must be arranged with the Instructor in advance. Due to religious observances that may conflict with the anticipated course schedule, all students will automatically have their three lowest quiz grades dropped.

Lab Assignments

Throughout the class we will use the computers to perform a series of assignments. These assignments will help reinforce the materials covered in the lecture portion of the class while also helping you apply the programming topics as you learn about them. In addition, these weekly assignments will prepare students for the Project.

Unless stated otherwise by your Instructor, all lab exercises are expected to be an individual effort. Each student will have his/her own machine. This room is used only for your class during the class. There are general-purpose machines throughout the university that you can use outside of class.

For each lab assignment, you will be given a problem based on topics covered previously in class and/or the reading. To complete these in-class assignments, you will be allowed to use your notes, text, etc. The weekly assignments must clearly display your name in the interface (if any) and be commented with your name in all files. Keep a backup of your work in case you need it for later lab assignments.

Assignments will be given and should be submitted according to the course schedule. You must turn in your lab assignment to the appropriate Assignments drop box (under Course Tools) on Blackboard in the IT 207 conference. As solutions may be posted, no late lab assignments will be accepted and help will not be provided on the due date of an assignment. If you miss or do not complete a lab assignment it will be to your advantage to complete it since later lab assignments may build on that assignment.

Project

There will be one project and presentation during the semester. You will complete the project primarily outside of the class. The project is a reasonably large programming assignment that will take several weeks to complete. Each student may be able to work in a group to complete the project. This will be determined later in the semester. This project will be due at the end of the semester; therefore late submissions are not accepted. You must turn in your project to the appropriate Assignments drop box (under Course Tools) on Blackboard in the IT 207 conference.

Since grading will be applied during the project presentations, the project must be done on time. In addition, the project will be graded based upon content and ability to compile. Help will not be provided on

the due date of the project. The final project must clearly display your name in the interface (if any) and be commented with your name in all files. Keep a backup of your work.

Programming Tutors

In addition to the Teaching Assistant who is a great resource for programming questions, there are programming tutors who can assist you with your lab assignments and project. The tutors will help you with problems using the programming environment, understanding the statements in the language, understanding programming concepts, understanding the intent of the projects, and locating bugs in your lab assignments and project. The programming tutors will not write the code for the project or lab assignments. The tutors are located in Science & Tech II, room 208 Monday-Friday 9:00am-5:30pm. In the vicinity of the room there are signs posting individual tutor language areas and hours.

Disability Accommodations

The Office of Disability Services [ODS] (ods.gmu.edu) works with students with disabilities to arrange for appropriate accommodations to ensure equal access to university services. Any student with a disability of any kind is strongly encouraged to register with ODS as soon as possible and take advantage of the services offered.

Accommodations for students with disabilities must be made in advance as ODS cannot assist students retroactively, and at least one week's notice is required for special accommodations related to exams. Any student who needs accommodation should contact the Instructor during the first week of the semester so the sufficient time is allowed to make arrangements.

Academic Honesty

Academic dishonesty is misrepresenting someone else's work as your own. This includes the past or current work of any other person – student, friend, colleague, relative, faculty member or absolute stranger, either with or without his/her knowledge. Academic dishonesty can be plagiarism, collusion, or outright cheating. A reference to clarify what is and is not plagiarism can be found at Capital Community College Library (www.ccc.commnet.edu/mla/plagiarism.shtml).

Since you will be allowed to work outside of class on lab assignment and the project, it is expected that you will continue to work independently unless the Instructor allows it otherwise. Assignments designated as group work require one assignment to be turned in for the entire group with each group member's name identified. All other assignments are to reflect your own individual work. Submission of an individual assignment under your name indicates that you understand and agree to abide by the honesty policy and that you agree to allow your assignment to be submitted to originality checking repositories.

Plagiarism and other academic actions contrary to the university's Honor System and Code (www.gmu.edu/catalog/apolicies/#Anchor12) will be addressed in accordance with these policies. These are single instance of policies. There are no second chances. All students involved will receive an 'F' for the course.

A Final Note

I believe that you will find throughout the semester that I am committed to your success in the course. With that said however, it is easy to fall behind. Do not let this happen to you because it will impact the quality of your course experience and your grade. Students often have full-time jobs and family obligations that can be quite demanding. When deciding whether or not to take this class, the student needs to determine whether they can balance their academic responsibilities with those of their job and family. If the student anticipates that circumstances will prevent them from participating regularly in the class or from turning assignments in on time, they should reconsider the decision to take the course. Individual work does not mean isolated learning. Without a student's active participation in the class, everyone's experience is diminished.