

Professor: Steve Brinton

Office: MacDonald 215 x4183 sbrinton@gordon.edu

Office Hours: MW 3:30-5 pm; Tues 2:00-5:00 pm and by appointment

Class Website: <http://www.cs.gordon.edu/courses/cs374/>

Class Hours: MWF 2:10 – 3:10pm

PREREQUISITE: Computer Science 211

CATALOG DESCRIPTION:

Survey technologies used to program multitiered, client/server, database-intensive, web-based applications. Topics include: Internet communication theory and protocol, client-side programming, handling form data, cookies, web stats, database back-end, and server-side programming.

Prerequisites: CS211 or permission of instructor

COURSE OBJECTIVES:

In general, this course is intended to familiarize you with multiple aspects of internet programming. The main objective of the class is to ground the student in both internet programming theory and practice. This will enable the student to participate in the growing World Wide Web so that they are equipped to better serve the Kingdom of God.

Detailed Course Objectives:

1. You should be thoroughly familiar with the theory of the internet and its communication infrastructure.
2. You should be familiar with the some of the major types of programming languages used on the internet – Perl, Javascript, PHP, XML and Actionscript (Flash).
3. You should be able to plan, design, and create both client-side and server-side programs.
4. You should have a stronger appreciation for web applications.
5. You should be very competent at designing, coding, and maintaining website applications.

TEXT: Knuckles, Craig and Yuen, David. *Web Applications: Concepts and Real World Design*. (John Wiley & Sons, 2005).

COURSE TECHNIQUES AND PROCEDURES

As in previous CS courses, regular practice with evaluation will be the heart of the course. For each unit of material, you will be asked to read a portion of the text book and to do assigned homework problems, and to apply the material you have learned through a continuing programming project.

Class sessions will include a discussion and amplification of the material in the text and the presentation of further examples and supplementary material. You may not grasp everything presented in the text when you first read it; however, you should note areas that are unclear to you and be prepared to raise questions about them in class. The course will travel at a rather brisk pace – therefore bring any and all concerns to the instructor as soon as possible.

Once again, the main objective of this class is the overall understanding of internet programming theory – this means you shall be able to take what you have learned and apply it to various internet programming practices including ones which will not be covered in class such as ASP and Coldfusion.

It will be assumed that you have a basic understanding of HTML, Javascript, and of course Java. Also solid understanding of basic programming concepts will be also be assumed. This is not a programming language course – it is an Internet programming course.

COURSE REQUIREMENTS AND EVALUATION:

1. You will be expected to read material from the textbook, as assigned in the schedule below. Reading assignments should be completed BEFORE the class hour in which the topic is discussed. Lecture presentations will assume that you have read the text, and it is expected that your participation in the class will reflect that fact. However, our classroom discussion will not rigidly follow the order of material in the text, nor will it be confined to material covered there.
2. Exercise problems will be assigned for material read. Take note: The professor will grade only a percentage of the assigned problems – however it will be imperative that you put your full effort into the complete set of problems in order to obtain the full benefit.
3. A “Project Thread” (A Continually Running Project) will accompany each chapter in the text until about a month before the end of the semester. For each chapter, you will place to updated project thread files on the Jonah Server – using FTP.
4. A Major Programming Project will be assigned about half way through the semester – your team will be responsible for planning, designing, and creating this project. It will utilize all of the theoretical and practical knowledge acquired in the semester’s first half. This project will be worth 38% of the final course grade, therefore a great deal of effort will be expected. (The professor will play the role of corporate website customer. The team will be expected to meet for outside customer strategy sessions.)
5. A mid-term examination (worth 14% of the final course grade) and a final examination (worth 16%) will be given as shown in the course schedule. Each exam will assume familiarity with material in the text, covered in lecture, and/or used in homework problems or projects. Exams will be open book (course text only), open notes.
6. Your final grade will be computed on the basis of a weighted sum of the items listed above.

Summary:

32% Assigned Exercises and Project Thread

38% Class Programming Project

30% Exams

100%

Grading Scale:

A: <=100% >=95%

A-: <95% >=90%

B+: <90% >=86%

B: <86% >=84%

B-: <84% >=80%

C+: <80% >=76%

C: <76% >=74%

C-: <74% >=70%

D+: <70% >=66%

D: <66% >=64%

D-: <64% >=60%

F: <60% >=0%

BEING RESPONSIBLE:

At times, the amount of work required may seem insurmountable – however it is expected that each student be responsible to strive to do his or her best. On this note, stealing or borrowing code/answers is not acceptable. It will result in a failing grade and any further action deemed appropriate by the college.

POLICY STATEMENT ON EXTENSIONS AND INCOMPLETES:

Extensions of the due dates for homework or projects will be given in the event of extenuating circumstances (such as illness, personal emergency) IF you submit a brief written request to the professor as soon as possible after the circumstances arise. This request will be initialed (if approved) and will be returned to you. You must attach it to the piece of work for which the extension was granted.

A grade of Incomplete will be given without penalty IF you are unable to complete the course work by the last day of the term due to major illness or other similar emergency. Again, a written request should be submitted. Such a request will only be granted if you are substantially up-to-date with your course work and were making good progress in the course up to the time that the difficulty arose. Of course, you must complete all work for the course by the midpoint of the next semester in accordance with College policy.

A grade of Incomplete with a penalty of one letter grade to be applied in the final grade computation MAY be given if you are unable to complete all the course work for reasons other than those noted above. You must make a written request, and your progress in the course, class attendance etc. will be taken into consideration in determining whether to grant it. Again, you must complete all work for the course by the midpoint of the next semester.

ATTENDANCE POLICY:

Regular class and lab attendance is expected of all students, and class attendance will be recorded. Absences from class will be classified as “documented” or “undocumented”. A documented absence is one where written documentation is submitted and approved by the professor supporting an absence from class due to circumstances beyond the student’s control (such as illness, family emergencies, etc.) An undocumented absence is any other absence. Students who have more than 3 undocumented absences will have penalty added to their final grade at the discretion of the professor. Students who have more than 9 undocumented absences will fail the course automatically.

A student who is habitually late will have late arrival for class counted as a half undocumented absence for that class, and a student who sleeps through most or all of a given class session will be counted as undocumented absent for that class.

A student who anticipates the need to miss more than three classes due to athletic competitions or other student activities should review the college’s attendance policy on page 31 of the catalog, and should then discuss alternatives to class attendance with the professor at the start of the semester.

STUDENTS WITH DISABILITIES:

Gordon College is committed to assisting students with documented disabilities (see Academic Catalog Appendix C, for documentation guidelines). A student with a disability who may need academic accommodations should follow this procedure:

1. Meet with a staff person from the Academic Support Center (Jenks 412 X4746) to:
 - a. make sure documentation of your disability is on file in the ASC,
 - b. discuss the accommodations for which you are eligible,
 - c. discuss the procedures for obtaining the accommodations, and
 - d. obtain a **Faculty Notification Form**.
2. Deliver a Faculty Notification Form to each course professor *within the first full week of the semester*; at that time make an appointment to discuss your needs with each professor.

Failure to register in time with your professor and the ASC may compromise our ability to provide the accommodations. Questions or disputes about accommodations should be immediately referred to the Academic Support Center. See Grievance Procedures available from the ASC.