CSCI 322 – Web Concepts II

Syllabus

Timothy H. Knautz, Lecturer, Computer Science Department, University of Wisconsin-Parkside

Office: MOLN 239

knautz@uwp.edu

http://www.cs.uwp.edu/staff/knautz

Office Hours:

By appointment.

Course Description

This course is the second of two courses that will introduce the student to the technical side of Web concepts. In today's fast paced communication-centered world, the World Wide Web is an important source for a plethora of information. Even though there is a wealth of tools for building Web sites, they cannot do it all. You still need to know "what's under the hood" to be an effective Web master.

Web Concepts II concentrates on server-side concepts and will introduce the student to the basic building blocks of Web site functionality: operating systems, Web servers, transport protocols, databases & SQL and server-side programming.

To reinforce the concepts, the student will learn technologies that are widely used in the Web community today. We will cover such technologies Linux, Apache & IIS, HTTP and URL's, MySQL and PHP.

Remember, this is a programming class!

Course Goals & Objectives

At the end of this course, you should be able to:

1. Understand the basic concepts behind an e-commerce style Web site,
2. Understand how the 2 most popular Web servers function and how those 2 programs are similar and different,
3. Understand the details of HTTP and URL's,
4. Build a Web-based database and use SQL to add, modify, delete and retrieve data to/from the database,
5. Use PHP to do basic programming activities,
6. Use PHP to perform basic e-commerce style activities,
7. Understand the issues, both technical and non-technical, relating to Web site security and information privacy.

Prerequisites

The prerequisite for this class is CSCI 220. The prerequisite will be enforced. This course assumes that you took the UWP CSCI 220, Web Concepts I. Before taking CSCI 322 it is assumed that you know the following general ideas:

1. Computers:
   - Basic hardware: memory, microprocessor, monitor, mouse, etc.
   - Basic networking: IP addresses, domain names, TCP/IP, etc.
   - Basic software usage: editor, browser, ftp.
2. Intermediate Programming:
   - XHTML: document layout, basic markup, hyperlinks, images, lists, tables.
   - CSS: styles, rollovers, classes and subclasses.

- JavaScript: variables, i/o, arithmetic, conditionals, looping, functions, arrays.
- Objects: dot notation, object access and the use of the various pre-defined objects.
- DOM: events, event bubbling and event handlers.
- Algorithms: how to use them, how to develop them

Required Text & Materials

Required Texts. (1) Server-side Programming: Understanding Web-based Applications, Compiled by Knautz, ISBN 0-596-50081-5. (2) Deitel, Deitel and Goldberg, Internet & World Wide Web, How To Program (Fourth Edition), ISBN-13 978-0-13-175242-9, ISBN-10 0-13-175242-1. Students must purchase their own textbook from the campus bookstore. Textbooks cannot be shared.

Media. Though not requited, students might like to have an electronic means of saving course work and class files. A flash memory drive is probably your best option.

Internet Connection. Finally, since this is a Web programming computer class, students are expected to have an internet connection. We will be using the internet in a number of different ways. You may use the schools internet via the laboratory machines or a dialup or broadband connection from home.

Course Format

Each class, whether lecture or lab, will begin with a question and answer period. This is where students can ask questions regarding the previous assignment, lecture, lab or any other issues that may have arisen since the previous class meeting.

This course is divided into 2 parts: Lecture and Laboratory.

Lecture. The lecture will expand on and highlight material in the textbook. In addition, this is a self-directed course that requires the student to read the textbook and understand examples and code contained in each chapter. It is imperative that the student read the assigned material so that the student will be prepared for lecture. The lecture may or may not include all the material presented in the chapter(s). However, students are responsible for all material within covered chapter(s) unless informed otherwise.

Laboratory. The purpose of Laboratory is to give you practical experience with the topics discussed in lecture. To prepare for lab each week, read that weeks assigned textbook material and read the lab if one exists. You must be prepared for lab by doing the appropriate pre-lab activities or you will not finish the lab in the allocated lab time. If you do not finish, you must complete the lab outside of class. Bring your textbook to every lab session.

You will also need to allocate time outside of your lab session to complete the work. Remember, this is a 300 level computer course: you are expected to use microcomputers at least 6+ hours per week to study, practice and complete the assigned material. You will succeed only with adequate preparation prior to class and lab.

Academic Performance

Accomplishment Levels. Your level of accomplishment will be recognized at the end of the course with a letter grade. Individual accomplishment is measured against course standards and not against the performance of other students.

Letter Grades. At the end of the course, letter grades (including plus/minus) will be assigned based upon you cumulative score percentages as follows:

Letter Grade	+	Grade	-
A		93.3% - above	90.0 – 93.2%
B	86.6 – 89.9%	83.3 – 86.5%	80.0 – 83.2%
C	76.6 – 79.9%	73.3 – 76.5%	70.0 – 73.2%
D	66.6 – 69.9%	63.3 – 66.5%	60.0 – 63.2%
F		Below 60%	

Weighting Distribution. The following weighting distribution will be used to compute your final grade:

2 Programming Projects:	67.00%
1 Final examination:	33.00%

Point Scores. Your final grade will be determined as a weighted average of your averages for assignments and exams. The weighting distribution is described in "Weighting Distribution" above. Each of the averages that are used for the weighted average is calculated as: number of points earned / total number of points x 100.

For example, if you earn 65 points out of a total of 80 points that it is possible for you to earn on laboratories, your laboratory average would be: 65/80 x 100 = 81.25. That final percentage is then weighted to produce a final, weighted percentage.

Extra Credit. No *special arrangements* will be made for extra credit for improving grades: there are ample opportunities for you to perform well with the assigned activities. However, there may be opportunities during the semester where I will give extra credit for attending special events.

Course Specifics

Attendance & Absences. Attendance to lectures is ***mandatory and expected***. If you miss a lecture due to some unforeseen circumstance, ***it is your responsibility to make up the missed material***.

Communication. All course communication will be accomplished in one of two ways: announcements during lecture and electronic communication.

- Missing a lecture is not an excuse for missing an announcement. See "Attendance & Absences" above.
- Email is the best way to communicate with your instructor outside of class. When using email, please include the following marker in the subject line: `CSCI322`. This marker shows that the email is from this class and will help me fight spam. If you do not include the marker, ***I may delete the email without looking at it***! Also, I will not reply to general emails regarding the assignments; it is simply too difficult to do this without looking at your work. If you need assistance with your homework, come to the open lab period.
- Desire2Learn (D2L) is used in this class as a course management tool. All course material can be found at the courses D2L Web site.

Homework Policy. There will be two types of homework: reading assignments and Project activities. Each is described in detail below. In general, reading homework is to be completed before the next lecture and project activities are to be completed by the given due date.

Late assignments will not be accepted. Extensions may be granted in rare cases when extenuating circumstances (like serious illness or disability, a death in the family, an accident, etc.) exist, and are supported by written documentation. There will be no extension of assignment deadlines if computing facilities are down close to the due date unless the downtime exceeds 24 hours.

Some assignments or projects may require a written discussion and/or documentation. If written material is required for a project, it must be typed or word-processed. Handwritten submissions are not acceptable. The one exception is diagrams, which you can draw by hand provided that they are neat and legible.

Lecture

Reading Assignments. You will be expected to read the assigned material prior to lecture. By doing this, you will be prepared for the discussion covered during the lecture.

Examinations. There will be a midterm exam and a final exam conducted during finals week. Exams cannot be "made-up". If you miss an exam without prior approval by the instructor, you will receive a grade of 0 (zero). NO EXCEPTIONS!

Laboratory

The purpose of the labs is to give you practical experience with ideas presented in lecture. The exact dates of the labs are "TBA" as we go into the lab once we have completed the proper classroom material.

Programming Projects

You will receive 2-4 programming projects throughout the semester. Programming Projects are to be submitted by the given due date and time. The way you submit your projects for grading will be given as part of the assignment description.

Late programming assignments will not be accepted; a grade of 0 will be given to all late assignments. Extensions that are not subject to penalty may be granted in rare cases when there are extenuating circumstances (such as serious illness or disability, a death in the family, an accident, etc.) and when these circumstances are supported by written documentation.

Since these are projects, they will require more time and effort than an assignment. The projects will be multi-week projects of usually 2 or 3 (or more) weeks. You need to begin your programming projects early and work at them through the assignment period. Do not start 2 days before the due date and expect to finish.

General

Grading questions. If you have a question about a grade, you should see me within one week of the day the graded work is returned to you (via D2L). ***You lose the right to re-grading after that***.

Incompletes. Incompletes (a grade of "I") ***are rarely granted***. The University has strict policies regarding grades of incomplete. These policies will be enforced. Incompletes are not to be used as a shelter from potentially low grades.

Computer Facilities. This class is scheduled to use the computer lab located in MOLN D116. This is a Linux based laboratory. You are required to fill out and sign a "UNIX Account Policy" form if you have not already done so. This form must be completed before you enter the laboratory facilities for the first time.

Academic Misconduct and Cheating. In this course, you are encouraged to study and prepare for lecture and labs with other students. However, when taking examinations, quizzes or working on individual assignments, you are to work alone. I will tell you if you are to work as a team. ***University regulations are very explicit concerning academic misconduct and cheating***. These regulations will be fully enforced. UWS 14.03 defines what academic misconduct is and what the penalties can be for academic misconduct. Please see "University of Wisconsin-Parkside Misconduct Policy, Policy #28", `http://www.uwp.edu/departments/governance/admin/policy/policy28.cfm` for details. The bottom line: Do your own work. If you have any doubts, please talk to me – before you do anything you might regret.

Inappropriate material in Web pages. Some material is strictly off limits for Web page content. Examples of inappropriate material include, but are not limited to:

1. All sexually oriented material including but not limited to language, pictures, video, etc.
2. Profanity or explicit language.
3. Violent, sadistic or cruel language, pictures, video, etc.

Again, this should be fairly obvious! If you use what your instructor deems to be inappropriate, you will have points removed from your final assignment score and be asked to remove the material. Again, if you have any doubts, please talk to me before you do anything you might regret.

Students with a Disability. Anyone who has special needs that must be accommodated to fulfill the course requirements should notify the ***instructor and Renee Kirby*** in the Office of the Educational and Career Development (WLLC D175, 595-2610). The University has many resources available to assist students with their academic studies.

Accommodation of Religious Observances. UW Parkside Senate policy requires that this institution make reasonable accommodations for a student's religious beliefs. ***Please notify your instructor within the first two weeks*** of class about any scheduled class date(s) that conflict with a religious observance.

Food and Drink in Class. Beverages and food are allowed in class as long as I do not have clean up after you. This is a privilege that I will revoke if I end up having to be your mother. Please practice a "carry in – carry out" policy.

Cellular Telephones and Pagers in Class. I find it very distracting, and quite frankly rude (as I'm sure other students do), when a ring tone goes off during class. As a courtesy to the instructor and other students, please either turn your cellular telephone or pager off or disable the ring tone during lecture and lab. If you must use the phone, please leave the classroom or lab and go to a place that will not disturb other students: use you cellular phone courteously.

Illnesses. If you are sick, please stay home. You are able to get all of your course materials on-line and you are able to turn in assignments on-line. So, if you are sick, there is no reason to be at school increasing others chances of getting sick. However, see ***Attendance & Absences and Examinations above***.

The instructor reserves the right to modify this syllabus at any time, as deemed necessary. The instructor reserves the right to adjust the scoring rubrics as is deemed necessary. The instructor also reserves the right to modify the number of and point totals of exams and/or labs.