

**Bergen Community College
Information Technology**

Course Syllabus

Course Title:

INF-263 Advanced Web Development

Credits/Hours:

3 credits/2 hours lecture, 2-hour lab

Course Description:

This course investigates a broad spectrum of web tools and technologies that are required to build and maintain client and server sites on the Web. Both client-side and server-side technologies will be discussed including the deployment of web sites.

Pre-requisite:

INF-146 Web Development and (INF-145 Visual Basic Programming or INF-152 C/C++ Programming or INF-153 Java Programming) or permission of the department chair

Textbooks and Supplies:

See course outline

Student Learning Objectives	Assessment Measures
1. Apply current web technologies and tools to create dynamic web pages.	Lab Activity Exam
2. Choose appropriate web tools to accomplish a given web task.	Lab Activity Exam

College Competencies:	Student Learning Objective:
Critical Thinking – Students will actively reflect on, reason about, and form independent judgments on a variety of ideas and information, and use these skills to guide their beliefs and actions.	2
Technological And Information Fluency – Students will demonstrate computer fluency, and will be able to retrieve, organize, analyze, and evaluate information using both technological and traditional means..	1-2

Course Content:

See course outline

Assessment:

An average of 60% from combined assessment measures is required to demonstrate proficiency in course material.

Exams	70%
Hands-on Projects and Labs:	30%

Bonus Points:

- Several unannounced quizzes (at instructor's discretion)
- Service Learning Opportunity when available (handout will be provided)
- Student Participation

Quizzes:

There may be several quizzes, each worth 10 points, given at the beginning of random or pre-selected classes. The quiz material will be based upon the prior lectures and labs and/or the reading assignments. At the end of the semester, the quiz points may be used to calculate "bonus" points. These "bonus" points would then be used to increase the student's exam average. A quiz cannot be made up if missed. A student entering class late, after a quiz has begun, will not be entitled to extra time to complete the quiz. Students entering class after a quiz is completed will not be permitted to take the quiz.

Testing:

Students **are required** to take **exams** on the day and time they are scheduled. If special circumstances require an **exam** schedule adjustment, this must be **worked out in advance** with the instructor. If a student misses an **exam** (except for prearranged circumstances with the instructor) a zero grade will be assigned.

The instructor can be reached by **telephone** (see course outline for appropriate phone number), **email, or a written note** can be left in the Divisional Office (during the day) A-306C or in the Evening Office L-113. If there are extreme circumstances (documentation may be required) that prevent a student from taking an **exam** according to the published schedule, the student should use one of the above options to contact the instructor before the next class. An arrangement for a special testing schedule is solely at the **discretion of the instructor**. A student who waits for the next class session to speak with the instructor will not be accommodated with a special **exam** schedule.

It is the student's responsibility to finish an **exam** correctly and completely and to submit it in the form designated by the instructor whether it is in electronic and/or hard copy form.

The use of electronic devices during exams is prohibited. Any student using an electronic device during an **exam** (unless directed to do so by the instructor) will receive a 0 for the **exam**.

Assignments:

Laboratory assignments and projects are hands-on productions that show the instructor that the student can competently use specified software. Some lab work will be required for grading and must be submitted when due. Acceptance of late laboratory work is solely at the **discretion of the instructor**.

In addition to any homework assignment given during class, it is a **standing assignment** that the student read each unit assigned. Following the class discussion, the student should reread the material and work with the exercises throughout the text.

It is anticipated that students will spend at least six hours per week outside the classroom working on course-related material.

Policies:

- Lateness – The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.
- The student must adhere to all college policies. Due to the nature of this course, it is recommended that the student review the policy titled “*Acceptable Information Technology Use at Bergen Community College*”.
- The use of portable electronic devices is not permitted while class is in session except as directed by the instructor. Please be sure to silence electronic devices before entering class.
- The use of college computers to play music during class is prohibited.
- Students are expected to exhibit appropriate college-level classroom behavior at all times.
- All course-related correspondence must be conducted using the online learning system’s mail tool and must have an appropriate subject specified in the subject-line. In the event the online learning system’s mail tool is unavailable, the student may reach the instructor using real-world email. The subject line of all real world email correspondence must contain the course number and section and student’s name. Any real world email received without this information will not be opened.
- Plagiarism in any form will be treated as a failure to complete an assignment. All work submitted should reflect individual effort by the student.
- In borderline cases that arise in almost every class each semester a student’s attendance, class participation, attitude, and observed effort will be considered in helping to determine the student’s final grade.

If the instructor does not appear after 20 minutes following the scheduled time, students should generate an attendance list. One volunteer member need deliver the list, containing the course title, date, and instructor’s name, to the Evening Office L-113 or to the Divisional Office (during the day) A-306C.

Additional policy and assessment information may be distributed by individual instructors.

PROPOSED OUTLINE

INF-263 Advanced Web Development [Semester Year] Course Outline	
Instructor:	
Faculty Web-Site:	
Course Web Site:	
E-mail:	
Telephone with Voice Mail:	
Office:	
Office Hours:	
Course Title: INF-263 Advanced Web Development Course Syllabus at http://www.bergen.edu/inf then click "Syllabi"	
Textbooks and Supplies: <ul style="list-style-type: none"> • Robert W. Sebesta, <u>Programming the World Wide Web 2009</u>, 5th Ed., Addison-Wesley, 2010, ISBN 13: 978-0-13-607663-6, ISBN 10: 0-13-607663-7. • Storage <ul style="list-style-type: none"> ○ Space on hard disk for development ○ Flash USB storage • Software: <ul style="list-style-type: none"> ○ Free downloads: PHP, Ruby, Java, Ruby on Rails ○ Microsoft C#, Microsoft ASP.NET, Adobe Flash ○ Browsers (free downloads): Internet Explorer, Mozilla Firefox, Opera, Safari, Chrome • File Transfer Protocol (FTP) client software (transfers files between client and web server) Use your favorite search engine to locate sites that provide ftp software. More details on ftp client software will be available when assignments are to be submitted to the web server (approx the 5th week of the semester). You can choose freeware or purchase ftp client software. Students in past semesters have reported using CuteFTP, WS_FTP, Fireftp (a plugin for FireFox) MiFiles, and CyberDuck (Mac). Please check carefully that the ftp client software you choose will work with your operating system (Win XP, Win Vista, Win 7, Mac, Linux). • Web Authoring software such as Microsoft Expression Web to facilitate web page development. 	
Additional Grading Information (see Syllabus for basic information): <ul style="list-style-type: none"> • As specified in the course syllabus, the final grade is computed as follows – 70% exam, 30% lab • Exams – Five exams will be offered. The highest 4 of the 5 exam scores will be used to compute the Exam portion of your final grade. • Quizzes – Quizzes may be available (instructor discretion). At the end of the semester the quiz average will be used as bonus points to increase your exam average • Assignments – Small labs, and larger projects, will need to be completed according to your instructor's directions and submitted for a grade. 	

Week-by-Week Outline

<u>Week</u>	<u>Dates</u>	<u>Tutorials and Assignments *</u>
Week 1 Week 2		Course Introduction Review of INF-146 – Web Development Chapter 1: Fundamentals Chapter 2: Introduction to XHTML Chapter 3: Cascading Style Sheets Assignments: Promissory Note To Be Determined <i>Exam 1 – Chapters 1-3</i> Exam must be taken during the specified EXAM timeframe
Week 3 Week 4 Week 5 Week 6		Client-side scripting Chapter 4: The Basics of JavaScript Chapter 5: JavaScript and XHTML Documents Chapter 6: Dynamic Documents with JavaScript Assignments: To Be Determined <i>Exam 2 – Chapters 1-6</i> Exam must be taken during the specified EXAM timeframe
Week 7		Chapter 7: Introduction to XML Assignments: To Be Determined
Week 8		Chapter 9: Introduction to PHP Assignments: To Be Determined <i>Exam 3 – Tutorials 1-4 & 5-6, Appendix D</i> Exam must be taken during the specified EXAM timeframe
Week 9		Chapter 10: Introduction to Ajax Assignments: To Be Determined <i>Exam 3 – Chapters 1-7, 9-10</i> Exam must be taken during the specified EXAM timeframe

Week-by-Week Outline

<u>Week</u>	<u>Dates</u>	<u>Tutorials and Assignments *</u>
Week 10		Chapter 11: Java Web Software Assignments: To Be Determined
Week 11		Chapter 12: Introduction to ASP.NET Assignments: To Be Determined <i>Exam 4 – Tutorials 1-6, Appendix D & 7-8</i> Exam must be taken during the specified EXAM timeframe
Week 12		Chapter 13: Database Access through the Web Assignments: To Be Determined <i>Exam 4 – Chapters 1-7, 9-13</i> Exam must be taken during the specified EXAM timeframe
Week 13		Chapter 14: Introduction to Ruby Assignments: To Be Determined
Week 14		Chapter 15: Introduction to Rails Assignments: To Be Determined
Week 15		<i>Exam 5 – Chapters 1-7, 9-15</i> Exam must be taken during the specified EXAM timeframe

**Chapters and Assignments may be modified based upon time constraints*