General Information

• Lecture, tests and labs all pre-recorded and available via http://bblearn.nau.edu

• Instructor: Steven M. Jacobs (Email: steven.jacobs (at) nau.edu)
  Faculty web site: http://cefns.nau.edu/~smj93/

• Office: Engineering Bldg 69, Room 254

• Office Hours:
  Email anytime with questions. Please include “CS112” in the subject or body of your email message. If you are local to Flagstaff, we can make an appointment to meet in my office. Any student can schedule a phone call, but email works best.

• Required Text:

• Web resources:
  Pearson Addison Wesley publisher “companion web site”
  plus numerous others to be discussed in class

Course Prerequisites:
MAT 110 College Algebra. Equations; problem solving; concept of function; linear, quadratic, exponential, and logarithmic functions and their graphs; systems of equations and inequalities; matrices, determinants, Cramer’s rule; sequences and series; combinatorics, and probability

Course Description:
CS112 Introduction to World Wide Web (WWW) and Internet. Provides a broad introduction to the World Wide Web and Internet-related software including e-mail, HTML, Telnet, and FTP. Includes discovery of ethical and privacy issues in e-commerce.

Specifically, this course introduces students to the languages and protocols of the web, and to a wide range of tools and technologies to creatively participate in basic web development. A key social issue explored is the impact of the WWW and Internet on issues of personal privacy and computer system security. The course emphasizes several essential skills including critical thinking and ethical reasoning regarding the issues of personal privacy and computer security in the WWW environment. Lastly, you will gain comfort and familiarity with new internet and computer technology.

Course Objectives
Upon completion of this course, students will be familiar with fundamental technical concepts that underlie the World Wide Web, including HTML, client-server systems, and various tools for creating web content. Some specific objectives include:

• Use of Technology:
  o Understand the basic concepts of distributed computing as they are used in the Internet.
  o Use PC and Unix tools to conduct research using WWW and the Internet. This includes studying FTP, HTTP, Telnet, e-mail, newsgroups and WWW search engines and browsers.

• Critical Thinking:
Create, use and test web pages and scripts in a Windows XP and UNIX environment;
Recognize and understand some commonly used terms particular to the web page development;

• Creative Thinking:
  Use some problem solving techniques to design user-friendly web pages;
  Use Microsoft Front Page (or equivalent) to design and employ various styles of web pages;

• Critical Reading:
  Explore various web-based concepts such as e-commerce, scripting, applets, cookies and web crawlers/spiders/robots;
  Investigate issues in the Web community regarding copyrights versus freedom of information;

• Ethical Reasoning:
  Understand the basics of security and ethical restrictions in WWW and Internet communities.

Course structure/approach:
The course will be presented in lecture format with an accompanying lab portion. The student will do several research projects on the WWW to investigate concepts covered in the lecture. The student will complete web page design and develop their own web page using the lab resources and their account. All lab work for this course can be completed at home using your own computing resources. You need to ensure your computing resources will provide sufficient throughput to accomplish your assignments. Typically, a browser such as Internet Explorer or Firefox with a broadband connection to the Internet (e.g. cable modem or DSL) should be sufficient.

Course outline: (may change…)

<table>
<thead>
<tr>
<th>Learning Modules</th>
<th>Textbook Chapter</th>
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<tbody>
<tr>
<td>0. Getting Started</td>
<td>W101: Ch1</td>
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<tr>
<td>1. First Things First</td>
<td>W101: Ch1</td>
</tr>
<tr>
<td>2. Personal Safety Online</td>
<td>W101: Ch2</td>
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<tr>
<td>3. E-mail management</td>
<td>W101: Ch3</td>
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<tr>
<td>4. Human-Computer Interaction</td>
<td>Materials to be provided by instructor</td>
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<tr>
<td>5. Web 2.0</td>
<td>W101: Ch4</td>
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<td>6. Basic HTML</td>
<td>W101: Ch9</td>
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<td>7. On-line Tools (Searching, Virtual Community, Software on the Internet, Encryption)</td>
<td>W101: Ch5, Ch6, Ch8</td>
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<td>8. E-Commerce and web applications</td>
<td>W101: Ch7</td>
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<tr>
<td>9. Web programming (Advanced HTML, Cascading Style Sheets) and Course summary</td>
<td>W101: Ch10, 11</td>
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Emergency Textbook Loan Program:
To help students acquire the materials they need to be successful in class, NAU has partnered with Follett to create the Emergency Textbook Loan program. The program is administered by the LEADS Center. The program assists students with unmet financial need in obtaining required textbook(s) and other materials for courses. Students must apply and meet eligibility criteria before textbooks are purchased on their behalf. Textbooks must be returned at the
end of the term in which the textbooks were loaned. More information can be found online: http://nau.edu/LEADS-Center/Textbook-Loan-Program/

Plagiarism and Cheating
Students are to work independently and without consultation with other students unless the assignment specifically states that you may collaborate. Grades are a way to motivate students and to evaluate students' mastery of a subject and their ability to get work done. The grades you get are not themselves truly important, but instead are representative of your knowledge, capabilities, and work ethic, and those are the things that matter.

If you plagiarize source code, fabricate results, make fraudulent claims, or attempt to cheat in any way, you are misrepresenting yourself, your level of understanding, your capabilities, and your ability to accomplish things. It is dishonest and unethical.

Anyone who plagiarizes, copies, fabricates, or cheats will at the least receive a zero on that assignment or test. Consulting with others and using their advice on projects is fine. However, the work you submit should be your own work that you thoroughly understand and are entirely responsible for.

Teaching Methods
Primary teaching methods for this course is learning modules in the class “BbLearn” web site (accessed via http://bblearn.nau.edu) that contain pre-recorded class lecture, hands-on computerized assignments, and written projects with opportunities for on-line class discussion. There will be course text readings, audio-recorded lecture with presentation charts, internet research, video reviews, assessments and hands-on assignments for each learning module. That will be described in detail in the “Getting Started” learning module. Class lecture presentations deal with conceptual ideas and theories. Projects involve solving problems through written and/or application software-generated solutions. Individual project work is always required and team-based projects may also be assigned.

Mechanisms for Feedback to Students/Interaction between Students and Professor:
Review the grading comments in BbLearn for any feedback on your work. On-line assessment questions have instant feedback provided with the correct answers. Your instructor is available by appointment to discuss exams, projects, and assignments. Email questions anytime. Please include "CS112" in body or subject of the email message.

Exams
There is one midterm and one final exam in this course. Exam time availability (exams are completed on-line) will be announced via BbLearn.

Make-up Policy
Make-up exams will be given for students who have pre-approved absences. An automatic reduction of 15 points (minimum) to 30 points will be assessed to the exam score for those students who are permitted to take the exam WITHOUT pre-approved absence due to extenuating circumstances. If you miss your final exam time, you will earn ZERO points on the final. Make-up exams may be different exams.

Assignments
Assignments are due the day and time specified by your instructor. NO LATE WORK ACCEPTED, but some work may be turned in early. Please follow all instructions for the assignment to earn full credit. Assignments are submitted to BbLearn, and are not emailed to the instructor.
Standard format for submitting homework
When you submit a document to any assignment, make sure you use a file naming convention like: Lastname-
firstname-Mod0-VideoReview.doc (or something similar) for the Module 0 video review assignment. Also, on your
document, always put at the top of your paper: first and last name, CS112, Module 0 video review (i.e. assignment
name), and date submitted. This helps us keep organized when grading, but will help you keep your CS112
homework files orderly.

Grade Calculation
Points will be assigned for accomplishments in the following areas. Extra Credit opportunities are offered at the
Instructor's discretion.

Grade Weighting
Assignments:
Includes Internet Research, discussion board postings, hands-on exercises, video critiques: 40%
Participation subjective grade: 10%
Assessments: 10%
Midterm: 20% (Modules 1-5)
Final: 20% (Modules 6-9)

After applying the grade weighting, final grades will be assigned using this scale:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>90%-100% of weighted score</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>Less than 60%</td>
<td>F</td>
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A Few Helpful Hints for Success in CS 112
The WWW has become so universal and easy to use that you may have the impression that creating functional web
pages is as simple as typing a paper. Nothing could be further from the truth. Although web programming is
relatively simple (compared to computer science as a whole), the technologies and concepts involves can,
nonetheless, be challenging for those with little computer or programming experience. Learning any programming
language -- even simple languages like HTML and Javascript -- requires study and practice on a regular basis. Very
few people do well trying to "cram" before exams in this class.
Here are a few further hints for success in CS 112:

Watch the Course Calendar! Homework and assessments (quizzes & exams) have specific start/stop dates. It will be
obvious in BbLearn what is due and when it is due. I will publish a course calendar and link it into the BbLearn web
site home page.

Read the book! My lectures will make a lot more sense to you if you read the corresponding sections in the book.

Do extra practice! Don’t let your assignments be the only time you try things out on the computer. When someone
asks a question in class and I say, "Hmmm…why don’t you go try that?" – go try it! My telling you how something
works is no substitute for seeing it yourself.
Participate in the classroom discussion board. You can make friends with someone in the class! This can come in handy if you happen to miss a class or need someone to study with for an exam. Ask questions using the discussion board. If something doesn’t make sense, ask about it. Learning how to use the computer and the web is a cumulative process – if you miss one concept, it may haunt you through the rest of the course.

Start your assignments early! Assignments are not just something to do at the last minute, turn in, and forget! They are an opportunity for you to build your knowledge, which you will later have to demonstrate to me on exams. So view these assignments as an integral part of the course and as something to look forward to. The length of time required to complete an assignment can vary greatly from student to student. So start early and get done well before the deadline. Remember, whatever can go wrong will and at the least opportune time. My willingness to help you with your assignment greatly diminishes in the hours immediately before it is due.

NAU Policy links
You will find a complete description of each policy here:

http://nau.edu/university-policies/

Also, please review the latest version of the on-line NAU Student Handbook here:

http://nau.edu/Student-Life/Student-Handbook/

The Safe Environment, Students with Disabilities, Academic Contact Hour, Academic Integrity, Research Integrity, Sensitive Course Materials and Classroom Disruption policies are available at:

http://nau.edu/OCLDAAA/_Forms/UCC/SyllabusPolicyStmts2-2014/

Resources for Student Success
Successful university students take advantage of services and resources designed to boost learning and achievement. NAU recommends that you begin with:

- **Your First Years and Beyond** - Explore the various opportunities to connect and engage throughout your undergraduate experience
- **Supplemental Instruction** - attend these course-specific review sessions whenever offered; proven to reduce D’s and F’s
- **Student Learning Centers** - free drop-in, online, and individual tutoring appointments for math, writing, and over 100 courses; available Monday through Friday
- **Resource Connect** - your online central navigation point for all NAU student resources

For a full-listing of University College services visit: http://nau.edu/University-College/

MyFoundations
Need to fill a gap? Brush up on your skills? Whether you need to get up to speed for your calculus class or brush up on your essay writing skills, the MyFoundations Self-Assessment and Development tool gets you on track for university-level academics. Free to all incoming first-year NAU Flagstaff students - topics include:

- Math
- Reading
- Writing
- Study Skills

How it works
1. Self-Assess: Complete a path builder assessment in the topic area of your choice, which creates specific modules for your personalized learning path based on your demonstrated needs for improvement or development
2. Self-Develop: Complete the learning paths for mastery
   - Instant feedback
   - Choose activities that fit your learning style
   - Work at your own pace

Where to find it - MyFoundations is in your course list in BbLearn