**Course Information**

**CS 344-01 (000937) – Introduction to Web Programming**

**Spring 2024**

**Instructor:** Daniel Nash

**Office:**

**Office Hours:** Tuesdays 8:40-9:00 pm (or by appointment). Also, e-mail [dnash62@gmail.com](mailto:dnash62@gmail.com) (I can respond quicker here) or [dnash@winona.edu](mailto:dnash@winona.edu) is encouraged.

**Classroom:** Singly Hall 102

**Course Hours:** Tuesdays 6:00 pm- 8:40 pm

**Text:** Fundamentals of Web Development, 3rd Ed by Randy Connolly ISBN: 0135863333 (eBook)

Companion site: <https://media.pearsoncmg.com/ph/esm/ecs_connolly_fowd_3e/cw/>

**Prerequisites:** CS 250 (RCTC's COMP 2247) or permission of instructor.

**I. Rationale:**

This is typically the first course students will take in web development through the computer science department. This course prepares students with a strong foundation in web development principles, including client and server-side models, design theory, and web architecture. It will introduce many modern web development technologies.

**II. Course Aims and Objectives:**

***Aims***

The primary goal of this course is to gain an understanding of web design and development.

***Description:***

The course's focus is on the fundamentals of the Web as a computer system and the components used in developing client-side web-based applications. Topics include markup languages (HTML and its variants), scripting languages (e.g., JavaScript, Perl, PHP), and applets, including security and digital signatures, multimedia content, animation, and usability issues. The course will also provide an overview of web history, web architecture, search engines, sustainability, and web security. Students will develop several web pages and programs throughout the course and work with a team to develop an integrated, interactive website. Prerequisite: CS 250 or permission of the instructor.

***Specific Learning Objectives:***

By the end of this course, students will:

* Understand concepts involved in web application design and gain experience in developing these designs.
* Develop some proficiency using web programming technologies such as HTML, CSS, JavaScript, XML, and others.
* Understand the distinction between client and server-side web programming and the advantages and disadvantages of each.
* Understand development processed and design considerations for webpage and web applications.
* Incorporate sustainable software development practices. Note that this course can be applied to the sustainability minor.

***Major Course Topics:***

* Web Fundamentals
* Webpage design
* Client-side Scripting
* Website Usability
* A variety of languages for website development
* Server-side Scripting

A more detailed list of topics can be found in the course schedule.

**III. Format and Procedures:**

This course is presented as a discussion, led by the instructor, in which students are encouraged to participate by sharing their knowledge and experiences, asking questions, and presenting solutions to the problems presented. Students should come to class prepared to discuss the topics of the day. As the instructor presents the material, students will be expected to give their full attention to the material, and the instructor will call on students to contribute. Lab work will also be included.

Students may utilize laptop computers in class to take notes. Students *may not* use cell phones, play games, use instant messenger, etc., during class. This type of behavior wastes everyone's time and is distracting to other students. Please do not come to class if this is how you intend to spend the time. Students should be respectful of each other and of the instructor.

In addition to the presentation of materials and related course discussions, group work and group presentations will be utilized as a learning tool during this course.

**IV. Course Requirements:**

**1.** Class attendance and participation policy:

Attendance is encouraged but not required. Those who attend will be expected to participate. Participation is included in course grades.

**2.** Course readings:

**(a)** Required text:

Fundamentals of Web Development  
Author: Randy Connolly and Ricardo Hoar

**(b)** Supplementary material as assigned

**3.** Assignments:

Programming and written assignments will be required for this course. Some of the assignments will be completed in teams. Programming assignments will be due before class time on their due date unless otherwise specified. No late assignments will be accepted.

***Course Schedule: 1/8/2024 - 5/2/2024***

|  |  |
| --- | --- |
| Date | Lecture/assignment |
| January 9 | Chap 1, 2 & 3 project 3.1; FTP exercise |
| January 16 | Chap 3 & 4 project 3.2, 4.1 & 4.2 |
| January 23 | Chap 4 & 5 project 5.1, 5.2, ; Form presentation & website teams |
| January 30 | Chap 5 & 6 project 6.1, 6.2 |
| February 6 | Chap 6 & 7 project 6.3, 7.1 & 7.2; Presentation topics selected |
| February 13 | Chap 8 & 9 project 8.1, 8.2, 8.3; Website Project submissions |
| February 20 | Chap 9 & 10 project 9.1, 9.2, 9.3 |
| February 27 | Midterm Chap 1 – 10 – MN Caucus night  Chap 12 project 10.1, 10.2, |
| March 5 | Spring Break |
| March 12 | Chap 13 & 14 project 12.1, 12.2, 13 Chat project? |
| March 19 | Chap 14 & 15 project chap 14 connect & display db |
| March 26 | Chap 15 & 16 project 15.1, 15.2 |
| April 2 | Chap 16 & 17 project 16.2 ? |
| April 9 | Chap 18 |
| April 16 |  |
| April 23 | Team website presentations |
| April 30 | Final |
|  |  |

Note: schedule is subject to change at the discretion of the instructor  
The last day to Withdraw Tuesday, April 9, 2024   
WSU Calendar - <https://www2.winona.edu/calendars/Media/Spring-2024-Academic-Calendar.pdf>

**V. Grading Procedures: Grades** will be based on:

|  |  |
| --- | --- |
| Exams | 50 % |
| Lab participation | 15 % |
| Website project and presentation | 20 % |
| Research paper and presentation | 15 % |
| **Total** | **100 %** |

### Grading Scale:

90 – 100 points = A  
80 –   89 points = B  
70 –   79 points = C  
60 –   69 points = D  
  0 –   59 points = F

In addition, student exam scores must average to a passing grade to receive a 'C' in this course.

**VI. Course Policies**

Students are expected to be present for all class meetings. At a minimum, we are all (you, your fellow students, and your instructors) are expected to treat each other politely and with respect. This includes turning off all cell phones (or muting them), participating in class, and arriving in a timely manner. Please remember that personal conversations during lecture and lab time are distracting to your fellow students.

All programming assignments and exams in *CS 344* are an open book/closed notes. It is considered cheating to view your notes or to communicate with or copy from a classmate during an exam. All programming assignments are individual assignments unless specified otherwise. Any and all assistance that you receive on programming assignments must be clearly documented within the program listing. Failure to disclose assistance that you received on a programming assignment is considered cheating, plagiarism and can result in disciplinary action. All programming assignments are due at midnight on the due date. *No late assignments will be accepted.*

**VII. Resources for Students**

Commitment to Inclusive Excellence: WSU recognizes that our individual differences can deepen our understanding of one another and the world around us rather than divide us. In this class, people of all ethnicities, genders, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences. If you feel your differences may in some way isolate you from WSU's community or if you have a need of any specific accommodations, please speak with the instructor early in the semester about your concerns and what we can do together to help you become an active and engaged member of our class and community.

Campus Resources

* WSU-Rochester Student & Campus Services, UCR Room SS128, 285-7100, [rochsss@winona.edu](mailto:rochsss@winona.edu) ([www.winona.edu/rochester/](http://www.winona.edu/rochester/))
* WSU Inclusion and Diversity Office, Kryzsko Commons Room 122, Winona Campus, 507-457-5595 ([www.winona.edu/culturaldiversity/](http://www.winona.edu/culturaldiversity/))
* WSU Disability Resource Center, Maxwell 314, Winona Campus, 507-457-2391 ([www.winona.edu/disabilityservices/](http://www.winona.edu/disabilityservices/))
* RCTC Counseling Center, UCR Room SS 133, 285-7260 ([www.rctc.edu/counseling\_career\_center/](http://www.rctc.edu/counseling_career_center/) )
* UCR Learning Center, UCR Room AT306, 285-7182
* GLBTA advocate is Tyler Treptow-Bowman: [Tyler.Treptow-Bowman@winona.edu](mailto:Tyler.Treptow-Bowman@winona.edu) 507.457.2625
* Advising and Retention, Maxwell 314, 507-457-5878 ([www.winona.edu/advising/](http://www.winona.edu/advising/))

Details about Campus Resources

* Two good places to help you find resources of all kinds are the WSU-Rochester Student & Campus Services Office and the WSU Inclusion and Diversity Office. Both offices are dedicated to helping students of all races, ethnicities, economic backgrounds, nationalities, and sexual orientations. They can facilitate tutoring and point you to a wide range of resources. The WSU-R Student & Campus Services Office is located in Room SS128 on the UCR campus and can be reached at 285-7100. The WSU Inclusion and Diversity Office is in Kryzsko Commons, Room 122, and they can be reached at 457-5595.
* If you have a disability, the WSU Disability Resource Center (DRC) can document it for your professors and facilitate accommodation. Their office is on the Winona campus in Maxwell Hall, and they can be reached at 457-2391. If you have a documented disability that requires accommodation, please let me know as soon as possible. If you suspect you may have a disability, you are encouraged to contact the DRC as soon as possible.
* College can be very stressful. Counselors are available in Winona and through a partnership with RCTC on the UCR campus to help you with a wide range of difficulties, ranging from sexual assault, depression, and grief after the loss of a loved one to stress management, anxiety, general adjustment to college, and many others. WSU counselors in Winona are located in Wabasha Hall 220 and they can be reached at 457-5330. The RCTC Counseling Center is located in SS 133 and can be reached at 285-7260.
* For help with writing and the development of papers on the WSU-Rochester campus, contact the UCR Learning Center in AT306 or call 285-7182.
* The GLBTA Advocate is responsible for documenting homophobic incidents on campus and working with the appropriate channels to get these incidents resolved. In addition, the advocate can direct people to GLBT resources.   
  \* Contact the WSU Counseling Center for the name and number of the current GLBTA Advocate (Integrated Wellness Center 222, 507-457-5330).

Class Resource

* Website to post projects: <http://webclass.hopto.org/>
* JSfiddler - <https://jsfiddle.net/>
* XAMPP - <https://www.apachefriends.org/index.html>
  + How to install video - <https://www.youtube.com/watch?v=TJcH0KnYfDc>
* W3School - <http://www.w3schools.com/>
* Filezilla - <https://filezilla-project.org/>
* FireFTP - <http://fireftp.net/>