$<h1>$ COMP 212   Web Development $</h1>$
M-W   Lecture/Lab – 2:00-3:20

Who:	Michael Gousie
Where:	Science Center 1325
When:	Mon 10:30-11:30; Tue, Thu 3:30-4:30; Fri 10:30-11:30
	and by appointment
E-mail:	mgousie at wheatoncollege dot edu
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Content:

This course covers the design and implementation of dynamic web-based applications. Topics include front-end (client-side) design and back-end (server-side) implementation, making this a full-stack development course. Much of the programming will be event-driven, which is a different way of thinking than you may be used to. Some of the tools/languages we will cover include:

- HTML5 - web page markup language

- CSS - textual language used to define rules for formatting a web page

- JavaScript - front-end scripting language that allows for dynamic content

- jQuery - a JavaScript library that handles common web page tasks

- PHP - server-side scripting language

- mySQL - a popular relational database management system (RDBMS)

Required Texts:

- There is a required e-book from **zyBooks** for this course. Go to learn.zybooks.com (there is a link on the course web page), create an account, and enter our zyBooks code:
  WHEATONCOLLEGEComp212GousieFall2019

  The subscription rate is ∼$75 for the semester.

- Lynch, P. and Horton, S. *Web Style Guide*, 4th edition. Yale Press, 2016. A link for the (free) e-book version is available on the course web page.

Recommended Texts:

- Duckett, J. *HTML & CSS: Design and Build Websites*. Wiley, 2011.

- Duckett, J. *JavaScript and jQuery: Interactive Front-End Web Development*. Wiley, 2014.

- Nixon, Robin. *Learning PHP, MySQL & JavaScript (with JQuery, CSS & HTML5)*, 4th Edition. O'Reilly Media, 2015. This is the most comprehensive text.

Grading:

There will be two exams during the semester and a comprehensive final exam. The exams make up 40% of your grade. There will be five web projects as well; the topics are shown below. Some of these may be completed in a (small) group. The projects are worth 50% of your grade. The remaining 10% of your grade will be comprised of reading the course textbook and *completing* the online quizzes/review questions given in each chapter. These must be completed by the due date; your responses and the date of those answers are collected on the web site. This means that you *must* register for the online book.

Grades will be assigned according to the following scale:

A = 93-100, A- = 90-92, B+ = 87-89, B = 83-86, B- = 80-82, C+ = 77-79, etc.

Exam Schedule:

Exam	Weight	Date
Exam 1	10%	September 30
Exam 2	15%	November 6
Final	15%	December 9 @ 9:00 AM

Assignment Schedule:

Program	Weight	Topic (Subject to change)
Web1	6%	Basic web page: HTML, server
Web2	10%	Better web page: HTML, CSS
Web3	10%	Dynamic web page: PHP
Web4	10%	Mobile web site
Web5	14%	Robust web site with full back-end functionality

Course Policies:

- You are responsible for all material covered in class, including the reading (and accompanying on-line quizzes) shown in the schedule below.

- If you must miss a quiz or exam for any reason, you must inform me BEFORE the test. Except in the case of emergency, illness (almost death), or you were taken away by aliens from Area 52 that is now the Dimple, makeup exams will not be given.

- Projects must be completed using the tools/languages specified in the assignments. Your web sites will be tested using the Firefox browser.

- Assignment due dates are FIRM.

  – All programming projects must be uploaded to the server by 11:59:59 PM on the due date unless otherwise noted. Projects submitted on the following day (i.e., after midnight) will receive a 15% penalty. Anything turned in later will receive a 0. Hard copy, if required, must be submitted the following day or as indicated in the project specifications.

  – Written homework must be handed in at the start of class on the due date. Electronic (zyBooks) homework must be completed by the due date. There are **no** provisions for late homework.

  – There will not be any individual "extra credit" work. If you did not have time to do a good job on the original assignment, how will you have time to do *additional* work?

- You are expected to adhere to the Honor Code.

  - Although *discussion* of projects or homework is encouraged, the *implementation* of programs is to be the result of your **own** work.
  - Collaboration on exams is prohibited.
  - Any violation of the above guidelines will result in a 0 for the assignment/exam and/or a failing grade for the course.
  - You will be required to write and **sign** the pledge on all work turned in: *I have abided by the Wheaton Honor Code in this work.*

- **The use of a laptop or other computer/pad is not allowed during lecture.** Note that we *will* be doing hands-on computing during class, where the use of your laptop is necessary. Special arrangements can be made for use of a laptop during lectures, if necessary.

- The use of cell phones, iPods, iPads, iPhones, iPlops, iFlops, and other personal electronic devices is prohibited during class, lab, and exams.

- Once class begins, no one should leave class except in the case of an emergency.

- Accommodations for disabilities:

  Wheaton is committed to ensuring equitable access to programs and services and to prohibit discrimination in the recruitment, admission, and education of students with disabilities. Individuals with disabilities requiring accommodations or information on accessibility should contact Autumn Grant, Associate Director for Accessibility Services at the Filene Center for Academic Advising and Career Services.
  ∼ accessibility@wheatoncollege.edu or (508) 286-8215 ∼

Course Schedule (Subject to change)**:**

Wk #	Week Begin	Topic	Reading*
	August		
1	25	Introduction, IDE, basic HTML	Chs. 1-2; L&H Chs. 1-4
	September		
2	1	HTML and CSS	Ch. 3; L&H Chs. 5-7
3	8	Design Principles	Ch. 6.1, L&H Chs. 8-10
4	15	Advanced CSS, Bootstrap	Ch. 4; L&H Chs. 11-12
5	22	Setting Up a Server; Intro PHP	Ch. 5
6	29	Exam 1 (Monday); More PHP	
	October		
7	6	HTML Forms; RDBMS	Ch. 6
8	13	*OCTOBER BREAK*, MySQL	Ch. 7
9	20	Mobile Development	Ch. 8
10	27	JavaScript Language	Ch. 9
	November		
11	3	DOM and JSON; Exam 2 (Wednesday)	Ch. 10
12	10	JavaScript: Ajax	
14	17	JavaScript: jQuery	Ch. 11
13	24	*THANKSGIVING BREAK*	Chapter Turkey
	December		
15	1	Putting it all together	
16	8	Final Exam on Monday, December 9 @ 9:00 AM	Whew!

* Readings are from the zyBooks e-book; L&H denotes *Web Style Guide* by Lynch and Horton.