

## **SYLLABUS – Web Developmnet**

Course Number DA670 / DA670S Semester Spring 2016 Instructor Robyn Overstreet

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# **Course Description**

This course will further develop the student's understanding of the technical components of web design and of developing interactive projects for the web. Students will learn the programming concepts that are used across all programming languages through client-side and server-side Javascript. Additional time will be spent gaining insight into web infrastructure as it is useful to the creative artist.

# **Main Course Topics**

- 1. HTML & CSS
- 2. Programming Basics
- 3. Client-side Javascript
- 4. The DOM
- 5. Server-side Javascript with Node.js
- 6. Interacting with the File System
- 7. Using Databases
- 8. Creating a Cohesive Web Application

# **Learning Objectives**

At the conclusion of this course, you will be able to do the following:

- 1. Build a static web site by hand
- 2. Understand the principles of computer programming
- 3. Utilize Javascript in the browser to manipulate the DOM
- 4. Run a simple web server using Node.js
- 5. Input and retrieve data to/from a database
- 6. Create a dynamic web application using Node.js and Express.js

#### **Course Format**

- Readings
- Focused mini-projects and assignments
- Video lectures
- Interactive web-based learning software
- Final web-based project incorporating elements from the course
- Live sessions for sharing work and questions

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# **Assignments:**

#### **MINI-PROJECTS AND ASSIGNMENTS**

Collectively, 50% of final grade

These will be pulled from a combination of web-language learning sogware, and focused applied studies/projects in web based technologies. You should expect each project or assignment to take 3 hours or less to complete. There will be one or two projects assigned each week.

#### ATTENDANCE AT LIVE SESSIONS AND PARTICIPATION IN THE FORUMS

20% of final grade

There will be 4 live sessions in this course. It is expected that students will regularly share their progress with the rest of the class in the forums. In the circumstance that it is impossible for a student to akend

a live session, they will be expected to respond to the live session in detail in the forums.

### **FINAL PROJECT**

30% of final grade

The final project will be of the student's choosing, but should employ multiple technologies and/or concepts discussed in the class. Possible projects might be but are not limited to: building a dynamic and responsive web service or mashup, creating a web-based art project, or any number of other projects of interest to the student.

# **Required Readings**

Textbooks:

<u>Web Development with Node and Express: Leveraging the JavaScript Stack</u> by Ethan Brown <u>Eloquent JavaScript</u> by Marijn Haverbeke

Chapters, Articles, and Resource Websites: assigned weekly on GoucherLearn

## **Grading [sample text – revise as desired]**

Course Elements	Percent
Mini-Projects and Assignments	50%
Attendence at Live Sessions and Participation in the Forums	20%
Final Project	30%
TOTAL	100%

### **Grade Scale**

Α	93 or more points
A-	90 - 92 points
B+	87 - 89 points
В	83 - 86 points
B-	80 - 82 points
C+	77 - 79 points
С	73 - 76 points
C-	70 - 72 points

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D	60 - 69 points
F	59 points and below

### **Course Policies**

#### Communication:

• Faculty will be available at their Goucher email address and will respond to queries within 24-48 hours.

- Course participants are responsible for maintaining continuous involvement with faculty, fellow students and student groups. In particular, participation in all online discussions is required.
  Ongoing communication allows you to gain deeper insights into the content, activities and assignments in the course. Please give notice of any obstacle that prevents this.
- You are encouraged to ask questions whenever information needs clarifying.
- For questions pertaining to your assignments: send an email directly to the instructor (please do not post personal questions on the discussion board).
- For questions about assignments that may be interesting and helpful to other class members: please use the discussion board.
- For problems with technical aspects of the website: contact helpdesk@goucher.edu (you may copy the instructor).

#### Missed Work:

You are responsible for material covered in the course. It is your sole responsibility to obtain any materials missed.

#### Late Policy:

For proper graduate student learning to occur, pacing of content mastery is critical. Therefore, assignments are to be completed on time. If extreme circumstances prevent an assignment to be completed in a timely fashion, please notify me before the assignment is due so a new date can be negotiated. Only follow-ups completed by the due date can be redone. Late assignments without such notification will be docked.

# **Academic Integrity:**

All final work products are to be the independent work of each student and stored in the electronic portfolio. Suspected violations of the Honor Code will be referred to the Academic Honor Board. For a full description of the code and what constitutes a violation of the code, refer to the Goucher Handbook or online at www.goucher.edu/x1292.xml.

### **Disability Support:**

http://www.goucher.edu/academics/academic-support/disability-support-services