



# **Course Syllabus**

# **Instructor/Course Information**

Instructor: Dr. Raghav V. Sampangi Office: CS 204

E-mail: raghav@cs.dal.ca Office Hours: By Appointment Class Meeting Time: Mon/Wed/Fri 15:35-16:25 Room No: Chemistry 226

 Lab Meeting Time
 Thu 11:35-12:55 (B01)
 Room No:
 CS 143

Thu 11:35-12:55 (B02) Room No: CS 133
Thu 11:35-12:55 (B03) Room No: CS 134

Course TAs: Brandon Poole (pooleb@dal.ca) – B01

Michael Altair (<u>m.altair@live.com</u>) – B02 Roc Wang (<u>roc.wang@dal.ca</u>) – B03

Course Homepage: <a href="https://dal.brightspace.com/">https://dal.brightspace.com/</a>

## **Course Description**

This class introduces students to key web concepts and skills for creating and maintaining websites. Topics include, but are not limited to, introduction to the Web, hypertext markup languages such as HTML, style sheets, client-side programming, multimedia foundations, dynamic content and website organization and maintenance.

### Goals

By the end of this class you will:

- Have a general understanding of the way the web works, as it pertains to website building, linking, hosting, and data storage.
- Be familiar with the software necessary to construct a basic website.
- Understand how website files across various systems.
- Have a working understanding of the HTML, CSS, and JavaScript languages -- the basic computer languages required to construct a website.
- Know the difference between online standards and conventions.
- Be able to display multimedia on a webpage.
- Have knowledge of general principles of website accessibility, website usability, and search engine optimization.
- Possess basic problem-solving skills relatable to programming.
- Be introduced to the technologies required to build and maintain larger, more complex websites.

# **Prerequisites**

There are no pre-requisites to this course. It is assumed that you have received no or minimal formal computer training but that you do have familiarity with using a computer and the web.

### **Important Dates**

- Reading Week (no classes): November 6 10, 2017
- Test-1: October 12, 2017 (during lab time; location TBD)
- Test-2: November 23, 2017 (during lab time; location TBD)
- Final Withdrawal Date without a "W": October 2, 2017
- Final Withdrawal Date with a "W": October 31, 2017
- Please check <a href="https://www.dal.ca/academics/important dates.html">https://www.dal.ca/academics/important dates.html</a> for other important dates.
- Assignment deadlines: Four assignments are due **11:30pm** on the following dates:
  - o Assignment 1: September 21, 2017
  - o Assignment 2: October 19, 2017
  - o Assignment 3: November 2, 2017
  - o Assignment 4: November 16, 2017
- Project deadlines: Project submissions are due at **11:30pm** on the following dates:
  - o Proposal: October 5, 2017
  - o Final code and report: December 5, 2017

## **Required Texts and Resources**

- There is no required textbook for this course. The lecture slides will be posted on the learning management system (Brightspace), and are important.
- Students may refer to the following recommended books to gain a better understanding of the subject matter:
  - o HTML and CSS: Design and Build Websites

**Jon Duckett** 

Wiley, ISBN: 978-1118008188

http://htmlandcssbook.com/

o HTML5 & CSS3 for the Real World

Alexis Goldstein, Louis Lazaris, and Estelle Weyl Sitepoint, ISBN: 978-0-9874674-9-2 (eBook)

http://sitepoint.com/

- Students are required to sign up for a Top Hat Student Response System account <a href="https://app-ca.tophat.com/e/476378">https://app-ca.tophat.com/e/476378</a>. Top Hat will be used in class to present questions and discussion topics that students can answer using their smartphones or electronic devices.
- Additional assistance is available from the Student Learning Centre (2nd floor, Goldberg CS Building).
- Course TAs will be available in the Learning Centre for 2 hours every week, in addition to being available during lab time. The schedule will be posted on the course website on Brightspace.

# **Tentative List of Topics**

- Introduction: Internet and the Web
- Programming languages for the Web and their purpose
  - HyperText Markup Language (HTML)
  - Cascading Style Sheets (CSS)
  - o JavaScript
  - o PHP
- Page layouts, information arrangement, interactive functionality

- Responsive design: Designing for varying screen sizes and capabilities
- Website accessibility, usability and security considerations
- Search Engine Optimization (SEO)
- Introduction to Content Management Systems (CMS)

### Class Format and Course Communication

- Content will be delivered via a combination of lectures and interactive exercises.
- Students will be expected to use the Top Hat Student Response System (https://app-ca.tophat.com/e/476378 or SMS: +1 647 931 6504)
- Students must ask the instructor permission before recording class lectures.
- Course announcements will be posted to the course mail list, which comprises the instructor's and students' Dal emails.
- It is the student's responsibility to check their Dal e-mail on a daily basis. To access your Dal e-mail see: <a href="https://www.dal.ca/dept/its/o365/services/email.html">https://www.dal.ca/dept/its/o365/services/email.html</a>

### **Evaluation Criteria**

- Participation (15%)
  - Students are expected to attend lectures and labs, and participate in discussion of the materials and in-class exercises. A part of the overall course evaluation will assess student participation in class/lab attendance, discussions, quizzes, and submission of lab reports.
  - o Top Hat quizzes/discussions during classes and labs, worth 7% in total.
  - o Lab exercises and attendance, worth 8% in total.
  - Late lab submissions will not be accepted.

#### Assignments (40%)

- There will be four (4) assignments designed to help you understand and apply the concepts you will learn in this course. The exact details of the assignments will be announced in class. The assignments are aimed at helping you critically evaluate the effectiveness of a website, and go from conceptualizing to developing a functional website.
- Each assignment is worth 10%
- Late assignments will not be accepted.
- Assignments must be submitted on Brightspace.
- No collaboration is permitted on the assignments.

#### Project (10%)

- There will be a project in this course. This requires you to choose from a list of entities to be announced in class (e.g. tourism, university, etc.), conceptualize, design and develop a website for the entity, as per given specifications.
- o Projects are due on the last day of classes (December 5, 2017).
- o Late project submissions will not be accepted.
- Test-1 (15%)
  - o To be held during lab time; location TBD.
- Test-2 (20%)
  - To be held during lab time; location TBD.

#### Notes

- As of 2015, a minimum grade of C must be achieved in all required CS courses.
- The grade conversion scale in Section 17.1 of the Academic Regulations, Undergraduate Calendar will be used.

# **Test Requirements**

- Photo ID is required
- No dictionaries, notes, calculators, cell phones, PDAs, talking slide rulers, or other electronic aids allowed.
- The tests must be written when scheduled. If you are not able to attend one of these tests for a valid reason, you must discuss it with me BEFORE the exam, with appropriate documentation (i.e. a doctor's note). Come to the meeting with the documentation. Alternate arrangements can be made if the reason is valid. Otherwise, your grade for the particular exam will be F.

# **Responsible Computing Policy**

Usage of all computing resources in the Faculty of Computer Science must be within the Dalhousie Acceptable Use Policies (<a href="http://its.dal.ca/policies/">http://its.dal.ca/policies/</a>) and the Faculty of Computer Science Responsible Computing Policy.

For more information please see: https://www.cs.dal.ca/downloads/fcs\_policy\_local.pdf

# Culture of Respect<sup>1</sup>

Every person has a right to respect and safety. We believe inclusiveness is fundamental to education and learning. Misogyny and other disrespectful behaviour in our classrooms, on our campus, on social media, and in our community, is unacceptable. As a community, we must stand for equality and hold ourselves to a higher standard.

#### What we all need to do:

- 1. **Be Ready to Act:** This starts with promising yourself to speak up to help prevent it from happening again. Whatever it takes, summon your courage to address the issue. Try to approach the issue with open-ended questions like "Why did you say that?" or "How did you develop that belief?"
- 2. **Identify the Behaviour:** Use reflective listening and avoid labeling, name-calling, or assigning blame to the person. Focus the conversation on the behaviour, not on the person. For example, "The comment you just made sounded racist, is that what you intended?" is a better approach than "You're a racist if you make comments like that."
- 3. Appeal to Principles: This can work well if the person is known to you, like a friend, sibling, or co-worker. For example, "I have always thought of you as a fair-minded person, so it shocks me when I hear you say something like that."
- 4. **Set Limits:** You cannot control another person's actions, but you can control what happens in your space. Do not be afraid to ask someone "Please do not tell racist jokes in my presence anymore" or state "This classroom is not a place where I allow homophobia to occur." After you have set that expectation, make sure you consistently maintain it.
- 5. **Find or be an Ally:** Seek out like-minded people that support your views, and help support others in their challenges. Leading by example can be a powerful way to inspire others to do the same.
- 6. **Be Vigilant:** Change can happen slowly, but do not let this deter you. Stay prepared, keep speaking up, and do not let yourself be silenced.

<sup>&</sup>lt;sup>1</sup> Source: Speak Up! © 2005 Southern Poverty Law Center. First Printing. This publication was produced by Teaching Tolerance, a project of the Southern Poverty Law Center. Full "Speak Up" document found at: <a href="http://www.dal.ca/dept/dalrespect.html">http://www.dal.ca/dept/dalrespect.html</a>. Revised by Susan Holmes from a document provided April 2015 by Lyndsay Anderson, Manager, Student Dispute Resolution, Dalhousie University, 902.494.4140, <a href="https://www.dal.ca/think">lynd-say.anderson@dal.ca www.dal.ca/think</a>.

## **University Statements**

This course is governed by the academic rules and regulations set forth in the University Calendar and the Senate.

https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=69&chapterid=3457&loaduseredits=False

### Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. <a href="http://www.dal.ca/dept/university-secretariat/academic-integrity.html">http://www.dal.ca/dept/university-secretariat/academic-integrity.html</a>

## Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of: a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (NS, NB, PEI, NFLD).

http://www.dal.ca/campus life/student services/academic-support/accessibility.html

## Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

https://www.dal.ca/campus\_life/safety-respect/student-rights-and-responsibilities/student-life-policies/code-of-student-conduct.html

# Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to be a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). <a href="http://www.dal.ca/cultureofrespect.html">http://www.dal.ca/cultureofrespect.html</a>

# Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit the office in the McCain Building (room 3037) or contact the programs at <a href="mailto:elders@dal.ca">elders@dal.ca</a> or 902-494-6803 (leave a message).

# **Learning and Support Resources**

- General Academic Support Advising
   http://www.dal.ca/campus life/student services/academic-support/advising.html
- Fair Dealing Guidelines https://libraries.dal.ca/services/copyright-office/guidelines/fair-dealing-guidelines.html
- Dalhousie University Library <a href="http://libraries.dal.ca/">http://libraries.dal.ca/</a>