COMP 2406 A/B – Fundamentals of Web Applications
Winter 2022
School of Computer Science, Carleton University
Course Syllabus

Course information

Class: Wednesday, 10:05 am-11:25 am EST (Ottawa time)

Instructor:
Name: Sana Maqsood
Email: sana.maqsood@carleton.ca
Office hours: by appointment on BrightSpace

About the course

1. What will I learn in this course?
This course will introduce you to the development of internet applications, with an emphasis on computer science fundamentals of technologies underlying web applications. Topics include: scripting and functional languages, language-based virtual machines, database query languages, remote procedure calls over the Internet, and performance and security concerns in modern distributed applications.

A course schedule and additional content will be provided on BrightSpace.

2. Which pre-requisites do I need?
One of [COMP 1406] or [COMP 1006] or [SYSC 2004] with a minimum grade of C- is required to take this course.

3. How will the course be delivered?
This course will be delivered online using a blended model. Specifically, course material will be provided via the following:
- [Asynchronous] Pre-recorded videos explaining key concepts (similar to class lectures); these will be available to watch on your own time.
- [Synchronous] Live Q&A sessions offered through Zoom, scheduled during the official class times.
- [Asynchronous] Additional material provided on BrightSpace.
- [Synchronous] Weekly live tutorials offered through Zoom to help you practice course concepts.
• [Asynchronous] Discussion forums on BrightSpace.

All synchronous components will be available in EST, Ottawa time zone.

4. Do I need to attend the synchronous sessions during class time?
You may study the course material on their own time. It is recommended that you attend the synchronous (Zoom) sessions, but attendance is not mandatory.

The synchronous (Zoom) sessions will be used to clarify concepts, go over examples, and answer questions from students. To encourage interaction and protect student privacy, the synchronous sessions will not be recorded.

We will also rely heavily on the asynchronous discussion forums on BrightSpace to answer frequently asked questions, and to encourage discussion of class topics. You are encouraged to participate in the online discussions.

Textbook

Is there a required textbook for the course?
There is no required textbook for the course. However, appropriate supplementary material will be provided throughout the course from various sources. One such resource is the https://www.w3schools.com website which provides tutorials on the basics of HTML, CSS, JavaScript, and Node.js. Some other textbooks you may find useful include the following:

- Eloquent JavaScript by Marijn Haverbeke (available online for free): https://eloquentjavascript.net
- Web Programming with HTML5, CSS, and JavaScript by John Dean (available online through the Carleton Library): https://ocul-crl.primo.exlibrisgroup.com/permalink/01OCUL_CRL/1gorbd6/alma99102276273770515

Evaluation of learning

1. How will my learning be assessed?
Learning will be assessed via 4 assignments and weekly tutorials. All these assessment components must be completed individually. No collaboration of any kind is allowed on the assignments or tutorials. The following are the deadlines and the associated weights for each of these components:
### Component Weight Due date

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight (each worth 2%)</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Tutorials</td>
<td>20%</td>
<td>Weekly, beginning on January 16th and ending on April 8th. Only best 10 will count towards your grade.</td>
</tr>
<tr>
<td>Assignment 1</td>
<td>20%</td>
<td>February 8th, 2022 at 11:55pm (EST, Ottawa time)</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>20%</td>
<td>March 1st, 2022 at 11:55pm (EST, Ottawa time)</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>20%</td>
<td>March 22nd, 2022 at 11:55pm (EST, Ottawa time)</td>
</tr>
<tr>
<td>Assignment 4</td>
<td>20%</td>
<td>April 12th, 2022 at 11:55pm (EST, Ottawa time)</td>
</tr>
</tbody>
</table>

2. **How can I do well in the course?**

In addition to attending the lectures, engagement with the material is required outside of class time to do well on the assignments. The target average workload for this course is 9-10 hours per week (including individual study time, asynchronous activities, and synchronous activities).

3. **Can I submit an assignment past the due date?**

You will have a total of 96-hour grace period for late submission of assignments. These hours can be divided in whichever way you want across the assignments. For example, you could: (i) submit one assignment 96 hours late; (ii) submit each of the 4 assignments 24 hours late, or (iii) divide the hours among the assignments however you want.

You do not need to contact us to use the grace period. Assignments handed in late beyond your 96-hour grace period will be penalized by a deduction of 10 marks (out of a possible 100), per 24-hour period, or part thereof (e.g., anything from 1 minute to 24 hours past the deadline still counts as one period).

4. **What happens if I missed a tutorial?**

There are no makeup tutorials, so if you are unable to attend a tutorial, you will receive a grade of 0 for that tutorial. However, since the best 10 out of 11 tutorials will count towards your grade, you do have a free tutorial, meaning that you can skip one tutorial.

### Software

**Which software do I need for this course?**

We will be using a variety of web programming languages and frameworks throughout the course, such as HTML, CSS, JavaScript, Node.js, and MongoDB. These will be introduced as the course progresses. However, if you would like to install [Node.js](https://nodejs.org) or [MongoDB](https://www.mongodb.com) in advance, please visit their respective websites for installation instructions.
You will also need some tools to create and edit your code, namely a text editor and a web browser. There are many options available for text editors. Some of these include Atom, Visual Studio Code, and Sublime. You should explore different text editors and use one that you are most comfortable with using. With regards to the web browser, we will primarily be using Google Chrome including its built-in developer tools.

### Academic integrity

1. **Can I collaborate with someone on an assignment or tutorial?**
   Collaborating on assignments or tutorials is strictly prohibited. Doing so would constitute a violation of Carleton University’s Student Academic Integrity policy. All violations of this policy (i.e., plagiarism) will be pursued through official university channels. It is your responsibility to familiarize yourself with the Student Academic Integrity policy. If you are unsure of the expectations regarding academic integrity (e.g., how to use and cite references, how much discussion of your work with others is appropriate), **ASK** your instructor beforehand.

2. **Can I post an assignment or tutorial question online?**
   Sharing assignments or tutorials online (e.g., to sites like Chegg, CourseHero, OneClass, etc.) is considered academic misconduct. In addition to this, you are never permitted to post, share, or upload course materials without explicit permission from your instructor. Academic integrity offences are reported to the office of the Dean of Science.

3. **What are the penalties for an academic integrity violation?**
   Academic integrity offences are reported to the office of the Dean of Science. Penalties for such offences can be found on the ODS webpage: [https://science.carleton.ca/academic-integrity/](https://science.carleton.ca/academic-integrity/).
   Typically penalties include the following:
   - First offence, first-year students (< 4.0 credits completed): No credit for assessment(s) in question, or a final grade reduction of one full letter grade (e.g., A- becomes B-), whichever is a greater reduction
   - First offence (anyone else): A grade of F in the course
   - Second offence (anyone): A grade of F in the course and a one-term suspension from studies
   - Third offence: Expulsion from the University

   Note: While these are the standard penalties, more severe penalties may be applied when warranted.

4. **What are the university policies regarding academic integrity?**
**Student Academic Integrity Policy.** Every student should be familiar with the Carleton University student academic integrity policy. A student found in violation of academic integrity standards may be awarded penalties which range from a reprimand to receiving a grade of F in the course or even being expelled from the program or University. Examples of punishable offences include: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found here: [https://carleton.ca/registrar/academic-integrity](https://carleton.ca/registrar/academic-integrity)

**Plagiarism.** As defined by Senate, "plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own". Such reported offences will be reviewed by the office of the Dean of Science. Standard penalty guidelines can be found here: [https://science.carleton.ca/academic-integrity/](https://science.carleton.ca/academic-integrity/)

**Unauthorized Co-operation or Collaboration.** Senate policy states that "to ensure fairness and equity in assessment of term work, students shall not co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis". Please refer to the course outline statement or the instructor concerning this issue.

### Intellectual property

**Can I share the class material with individuals outside of the course (e.g., CourseHero, OneClass)?**

No. All lecture and course materials (including all PowerPoint presentations, course notes, handouts, and similar materials) are protected by copyright. The instructor is the exclusive owner of copyright and intellectual property of all course materials. You may take notes and make copies of course materials for your own educational use. You may not allow others to reproduce or distribute lecture notes and course materials publicly for commercial purposes without the instructor’s express written consent.

### Student support services

**Mental health and well-being**

Carleton University offers programs and services that promote positive mental health and assist students with realizing their full potential. These student support services and resources are explained here: [https://carleton.ca/studentsupport/supporting-our-students](https://carleton.ca/studentsupport/supporting-our-students)

**Undergraduate Academic Advisor**
The Undergraduate Advisor for the School of Computer Science is available in Room 5302C HP; or by email at scs.ug.advisor@cunet.carleton.ca. The undergraduate advisors can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisors will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and Writing Tutorial Services.

**SCS Computer Laboratory**

SCS students can access one of the designated labs for your course. The lab schedule can be found at: https://carleton.ca/scs/tech-support/computer-laboratories/. All SCS computer lab and technical support information can be found at: https://carleton.ca/scs/technical-support/. Technical support is available in room HP5161 Monday to Friday from 9:00 until 17:00 or by emailing SCS.Tech.Support@cunet.carleton.ca.

### Accommodations

For information about Carleton's academic year, including registration and withdrawal dates, see Carleton's Academic Calendar.

**Pregnancy Obligation.** Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit Equity Services.

**Religious Obligation.** Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit https://carleton.ca/equity/focus/discrimination-harassment/religious-spiritual-observances/.

**Academic Accommodations for Students with Disabilities.** If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the Paul Menton Centre website.

**Survivors of Sexual Violence.** As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and
survivors are supported through academic accommodations as per Carleton’s Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

**Accommodation for Student Activities.** Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the policy.

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**Health and safety**

**COVID-19**

All members of the Carleton community are required to follow COVID-19 prevention measures and all mandatory public health requirements (e.g. wearing a mask, physical distancing, hand hygiene, respiratory and cough etiquette) and mandatory self-screening prior to coming to campus daily.

If you feel ill or exhibit COVID-19 symptoms while on campus or in class, please leave campus immediately, self-isolate, and complete the mandatory symptom reporting tool. For purposes of contact tracing, attendance will be taken in all classes and labs. Participants can check in using posted QR codes through the cuScreen platform where provided. Students who do not have a smartphone will be required to complete a paper process as indicated on the COVID-19 website. All members of the Carleton community are required to follow guidelines regarding safe movement and seating on campus (e.g. directional arrows, designated entrances and exits, designated seats that maintain physical distancing). In order to avoid congestion, allow all previous occupants to fully vacate a classroom before entering. No food or drinks are permitted in any classrooms or labs.

For the most recent information about Carleton’s COVID-19 response and required measures, please see the University’s COVID-19 webpage and review the Frequently Asked Questions (FAQs). Should you have additional questions after reviewing, please contact covidinfo@carleton.ca

Please note that failure to comply with University policies and mandatory public health requirements, and endangering the safety of others are considered misconduct under the Student Rights and Responsibilities Policy. Failure to comply with Carleton’s COVID-19 procedures may lead to supplementary action involving Campus Safety and/or Student Affairs.