WEB SYSTEM DESIGN & MANAGEMENT

****The final version will be available before the add/drop deadline (Sept. 10).**

COURSE DETAILS

Course Code: INFS 634 (Fall 2024)
Credits: 3
Class timings: 05:35 PM - 08:25 PM, MONDAY (SEP 9TH - DEC 4TH, 2024)
CRN: 3190
Location: EDUC 338

Formal Description:
Information Studies: Principles and practices of designing websites in the context of libraries and information centres, focusing on a conceptual approach to organizing information for the world wide web including design, implementation and management issues. Topics include web development tools, markup languages, internet security and web server administration.

What to expect?
In this course, students will use various web design & development software to organise, create, publish, and manage websites. At the end of this course, you will be able to:

1. Understand web design principles, including a user-centred design approach to developing websites for prospective clients and users.
2. Understand best practices in web design and web programming. Learn how to create accessible designs, web design kits, prototypes, etc.
3. Develop skills in various software/tools used for web development, including collaborative tools such as Github, Figma for design, Canva, code editors, etc.
4. Learn basic (markup) programming skills in web development, such as HTML and CSS.
5. Learn management and technical architecture of different types of servers, including practical knowledge of creating local web servers and GitHub pages for hosting websites, security, and sustainability.

INSTRUCTOR DETAILS

Kartikay Chadha
Email: kartikay.chadha@mcgill.ca
Please start the subject line of all your emails with "[INFS 634 - FALL2024]"

Office Hours:
By appointment to be confirmed on a case-by-case basis via Email.

RECOMMENDED READINGS & RESOURCES

There are many excellent, freely available online tutorials. The textbook listed below will only be used as a reference to learn and implement web programming syntax. Students will be expected to refer to latest versions of manuals published for using development tools/software.

Duckett, Jon (2011). HTML & CSS: Design and Build Websites. Indianapolis, IN: John Wiley & Sons. http://mcgill.worldcat.org/oclc/796829490 OR https://wtf.tw/ref/duckett.pdf

Additional details will be posted on MyCourses under the Content section.

HTML Tutorial: https://www.w3schools.com/html/
CSS Tutorial: https://www.w3schools.com/css/default.asp

Community Forum for developers: https://stackoverflow.com/
Stackoverflow is a handy online platform for finding solutions to computer programming questions. You can search StackOverflow for questions about syntax, algorithms, methods, etc.

INSTRUCTIONAL METHODS

The classes are expected to be held weekly in person during the scheduled time. If an in-person class is not possible, the session will be held via Zoom during the scheduled time. The classes will not be recorded; Students are encouraged to take notes and review presentations posted on MyCourses. The topics listed in the weekly schedule below will be covered during the class hours. The class hours are structured to ensure a comprehensive learning experience that balances theoretical knowledge with practical application.

The first hour will be dedicated to a lecture by the instructor. During this time, the instructor will introduce and discuss foundational concepts, design principles, and the latest industry practices. The instructor will cover the topics in the weekly schedule below.

In the second hour, the focus will shift to practical application. Students will be encouraged to engage directly with the lecture by working on small exercises and hands-on projects that mirror real-world scenarios. This segment of the class is crucial for reinforcing the concepts discussed in the lecture, as it allows students to experiment, problem-solve, and apply their knowledge in a controlled environment.

The session's remaining time is reserved for additional discussion and in-class activities or assessments. This time is versatile, serving multiple purposes based on the student's needs and the course's progress. It may be used for evaluations through quizzes or submitting reports based on their in-class exercises. Alternatively, this hour can also be devoted to open discussions, providing a platform for students to ask questions and to work or receive personalised feedback from the instructor on the course material or their assignments.

WEEKLY SCHEDULE

Note: The weekly schedule is subject to change according to class progression. Please regularly check MyCourses for any changes/updates.

Date	Week	Topics	Assessment
Sept 9	1	Introduction - Instructor & Students Syllabus overview	
Sept 16	2	User-Centered Design Principles Website Proposal Design Kit Logos, Colour Theory, Typography etc.	In-class assessment (5 Points)
Sept 23	3	Design Principles - Continued Canva for Design - Introduction Tutorial on Canva for creating brand kits, proposals, CVs, and presentations.	
Sept 30	4	Canva for Design - Continued Site-map & Wireframes Visual sitemaps, mockups, prototypes, wireframes, etc.	In-class assessment (5 Points)
Oct 7	5	Site-map & Wireframes - Continued	
Oct 14		**No Class (Reading Week / Study Break)**	
Oct 21	6	Wireframe Workshop	Mid-Term (35 Points)
Oct 28	7	GIT, Github & HTML - Introduction HTML - Continued	In-class assessment (5 Points)
Nov 4	8	HTML - Continued CSS - Introduction	*Get your final project approved by Nov 4*
Nov 11	9	CSS - Continued Pre-designed Development Frameworks	In-class assessment (5 Points)
Nov 18	10	Web-Server: Creating server & Management	In-class activity (5 Points)
Nov 25	11	Standard on Web Accessibility: Requirements & Compliance	In-class assessment (5 Points)

Dec 2	12	Oral discussions on the final project In-class feedback for final revisions Revising project website codes for Final submission	Final Project Submission (35 Points) *Initial on Dec 1* *Final on Dec 6*
Dec 4 (Make-up Day)	13		

ASSIGNMENTS, SUBMISSIONS & EVALUATIONS

Detailed submission guidelines and evaluation breakdowns for each assessment will be discussed in class and posted on MyCourses. An overview is described below:

1. **In-class Activities and Assessments (30%):** To enable hands-on practical learning, students will be given exercises or quizzes to complete within the class hours. This may comprise writing a short report or quiz (usually multiple-choice questions) on what was taught in the class or creating deliverables based on exercises assigned to students during the class.
   Thirty points for in-class activities are divided across six classes, 5 points each, as listed in the weekly schedule above. Submissions for class activities are due at the end of the class hour. However, students may submit deliverables later for certain activities. Submission details and deadlines will be posted on MyCourses for every in-class assessment activity.

2. **Wireframe & Prototyping - Mid-Term (35 %)**: This group assessment will be held in a workshop during Week 6 (Oct 21) class hours. In teams of 4-5 (decided by the instructor), students will work together to develop a low-fidelity wireframe in class. At the beginning of the class, students will be given a topic and requirements to build a wireframe. Each group will work on a wireframe and post their wireframes on MyCourses during the class hour. Each student is expected to evaluate every wireframe and provide constructive written feedback to their peers.
   The students will be evaluated based on their creativity in designing a website wireframe, following best practices, and providing constructive feedback to their fellow students. After the workshop, the instructor will consolidate all feedback, write additional comments, and share it with the students. The images of the wireframe developed during class will be posted on MyCourses by the end of the class hour on Week 6 (Oct 21). Students must submit their feedback and evaluations before Oct 22 end of the day; however, students are encouraged to complete this during class hours. Detailed instructions, assessment and feedback criteria will be shared with students through MyCourses.

3. **Project website (35%):** Students will decide to develop a simple website for this course. Potential project examples include a personal website, building/re-designing a website for the archive/library, etc. Students are expected to finalise the topic of their website project by Week 8 (Nov 4), and the instructor must approve it. This is an individual assignment. The instructor must approve exceptions to work in a group. The detailed requirements for the submission will be posted on MyCourse. Students must submit their initial website codes on GitHub via MyCourses to the instructor by 1 December 2024. The evaluation will include an oral discussion with the instructor (after the initial submission of the codes), where students must explain their decision-making process in developing their website, describe the structure of their

HTML and CSS codes and file structure, and answer to instructor's question about the development process. The oral discussion will be scheduled during classes 12 and 13. The students can work on revising their final project assignment during the 12 and 13 class hours. Final submission of codes will be due on 6 December 2024. Note: Any commits/pushes recorded on Git after the submission deadline will be excluded from the final evaluation.

Submission deadline / Late submissions:
In-class activities and the Wireframe & Prototyping Workshop should be completed and submitted before the end of class (Peer Feedback for Mid-Term is due on Oct 21). Some assignments may have a larger scope and will be due after class. Submissions will be primarily made through MyCourses.

Extensions will be granted only on a case-by-case basis. Extensions must be REQUESTED AND APPROVED via email at least 48 hours before the assignment is due. Your submission should be complete for evaluation, i.e., include all files uploaded to MyCourses, push codes to the Git repository, and fulfil any/all other requirements provided in the submission guidelines on MyCourses. **The final submission deadline (date** and **time) will also be posted on MyCourses.**

Late or incomplete submissions without prior approval or discussion with the instructor will receive a grade of zero (0). If you miss an in-class activity, please contact the instructor immediately. Substitute assessments may be accepted case-by-case upon instructor approval under exceptional circumstances.

In the event of illness, standard McGill rules for extensions will apply with a physician's note and will not count towards your late submission passes. Please contact me as soon as possible to discuss a submission plan.

Use of Generative AI (Chat GPT)
Students should NOT use generative AI to produce short reports or answer quizzes during in-class or mid-term activities. However, students ARE ALLOWED to create, edit, and refine HTML and CSS codes throughout the course work, especially for the final project assignment. The instructor will include explicit instruction on using Generative AI for assessments assigned to the students. Where Generative AI is permitted, students MUST write a short report (~1 Page) explaining what component of the assignment involved using generative AI and how it helped develop their assignment.

MCGILL POLICY STATEMENTS

Academic Rights and Responsibilities
All students must be thoroughly familiar with the Student Rights and Responsibilities: http://www.mcgill.ca/students/srr/.

Integrity
This class follows McGill University policies, procedures and guidelines (https://www.mcgill.ca/secretariat/policies-and-regulations). Class participation is a valued aspect of this course.

Discussions on class-related materials and business, whether they take place in the classroom or online (e.g., via Zoom or the discussion board on MyCourses), should be conducted respectfully, reflective of both the class policies (bulleted below) and McGill University policies, procedures and guidelines.

- "McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures."
- For assignments, reports, presentations, or whenever the words or ideas of others are used, sources must be appropriately quoted and cited. Class Conduct

Copyright of Course Materials

Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are protected by law. They may not be copied or distributed in any form or medium without the instructor's explicit permission. Note that copyright infringements can be subject to follow-up by the University under the Code of Student Conduct and Disciplinary Procedures. No audio or video recording is allowed in class without the explicit permission of this instructor.

Students with disabilities

If you have a disability, please consult the *Student Accessibility and Achievement* (formerly known as *the Office for Students with Disabilities*) (https://www.mcgill.ca/access-achieve/)

Extraordinary Circumstances

The syllabus may change due to extraordinary circumstances beyond the University's control, and this course's content or evaluation scheme is also subject to change.