WEB SYSTEM DESIGN & MANAGEMENT

COURSE DETAILS

Course Code: INFS 634 (Fall 2023)
Credits: 3
Class timings: 11:35 AM - 02:25 PM, MONDAY (SEP 11TH - DEC 4TH, 2023)
CRN: 3286
Location: LEA 212

Formal Description:
Information Studies: Principles and practices of designing websites in the context of libraries and information centers, 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 Web Design course, students will use a variety of web-design & development software to organize, create, publish, and manage websites. At the end of this course, you will be able to:

1. Understand web-design principles, including user-centered design approach to developing websites for your prospective clients.
2. Understand best practices in web-design and web-programming. How to create accessible design, 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 how to create responsive websites using HTML, CSS and bootstrap framework for web-development.
5. Create & maintain servers to host dynamic web-pages using PHP and databases. Understand shared web-hosting, security and management.

INSTRUCTOR DETAILS

Kartikay Chadha
Email: kartikay.chadha@mcgill.ca
Please start the subject line of all your emails with "[INFS 634 - FALL2023]"

Office Hours: https://calendly.com/kartikaychadha/openhours
Book any open slot **ONLY** under "INFS 634 - Open Hours".

RECOMMENDED READINGS & RESOURCES

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

Vaswani, V. (2021). PHP A Beginner's Guide. http://englishonlineclub.com/pdf/PHP%20-%20A%20Beginner%E2%80%99s%20Guide%20[EnglishOnlineClub.com].pdf

****There are many excellent freely available online tutorials. The text books will only be used as reference to learn and implement web programming syntax. Students will be expected to refer to manuals published for using development tools/software.**

Additional details will be posted on MyCourses under 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 very useful online platform to find solutions to computer programming questions. You can search Stackoverflow for questions related to syntax, algorithms, methods etc.

INSTRUCTIONAL METHODS

This course will implement a project based learning to provide an experience of working as a web-designer and developer. Students will choose to develop a web project in groups of 5. It is strongly encouraged that all projects are approved by the instructor on or before week 3. Students will be using tools and programming languages taught during the class hours to build their projects.

Students can decide on developing either a website or web-application for this course. The instructor will provide options, instructions and guidance in selection of your project. The final outcome should include multiple static and few dynamic web-page that uses PHP and server hosted database(s). The students as groups are expected to come up with project ideas and discuss with the instructor during week 2. The scope of the project may vary and alter as the term progresses and therefore constant communication between the groups and with the instructor is very important!

Potential project categories:

1. Build/Re-design a research website
2. Build/Re-design a website for archive/library
3. Innovative Web-app

The classes are expected to be held weekly in-person during the scheduled time. In case of a situation where in-person class is not possible, the session will be held via Zoom during the scheduled time. The topics listed in the weekly schedule below will be covered during the class hours. Any remaining time during the class hours can be used to work on your website project or discuss on-going development with the instructor for feedback.

WEEKLY SCHEDULE

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

Date	Week	Topics	Submissions
Sept 11	1	Introduction - Instructor & Students Syllabus overview	
Sept 18	2	Site-map & Wireframes Brand Development/Website Proposal Design Kit	
Sept 25	3	Figma for Design (Guest Lecture: Maria Yala)	Project proposal (Milestone 1)*
Oct 2	4	HTML & CSS - Introduction	
Oct 9		**No Class (Reading Week / Study Break)**	
Oct 16	5	HTML & CSS - Continued	Design Kit (Milestone 2)
Oct 23	6	Bootstrap: Web-development framework Introduction	
Oct 30	7	Bootstrap: Web-development framework Continued	
Nov 6	8	Design presentations & review Each group presents their website prototype created in Figma.	Figma Prototype (Milestone 3)
Nov 13	9	Web-Server: Creating server & Management	
Nov 20	10	Dynamic websites: Introduction to PHP Using server hosted databases	
Nov 27	11	Standard on Web Accessibility: Requirements & Compliance	
Nov 30 (Make-up Day)	12	Guest Lecture OR Special Topic: TBD	

Dec 4	13	Final presentations & review Each student/group to present their functional website	Final Website (Milestone 4)

ASSIGNMENTS & SUBMISSIONS

The development steps of your project will be the milestones serving as assignments that will be evaluated. There are 4 milestones. **Detailed submission guidelines for each milestone will be discussed in class and/or posted on MyCourses**. An overview for each milestone is provided below:

1. Website Proposal (10%)*
   A website proposal in PDF format should be uploaded to MyCourses.

* Week 3 submission is an optional deadline but the assignment is not optional. You are encouraged to submit your website proposal on Sept 25, however you will not be penalized for submitting it along with your Design Kit on Oct 16 (after the reading break). The submissions will not be accepted after Oct 16, unless an extension is pre-approved : please read <<*Submission deadline / Late submissions*>> section below.

2. Design Kit (10 %)
   Design Kit should include: Sitemap, wireframe & Brand Kit.
   A document explaining your choices and planning. As a group you will divide the site-map into sections for each group member to work on.
   Students will upload a PDF copy of the submission to MyCourses.

*If you are submitting a Design Kit with your Website Proposal, please make sure to submit 2 separate submissions on MyCourses for evaluations. DO NOT combine the two assignments together or else you will be marked only for 10% of the final grade instead of 20%.

3. Figma prototype (30%)
   A functional prototype is expected to be delivered.
   All pages should be carefully designed and correctly inter-connected.
   A pdf export from Figma along with a link to a functional prototype should be submitted on MyCourses.
   Groups will also be expected to present their proposal, prototype and design kit for feedback in-class.

4. Final submission (40%)
   The students/groups will present their functional website to fellow students & the instructor during the class hours for feedback/evaluation. Codes will be submitted by uploading the Zip version export from your Git repository to MyCourses and sharing the final Git repository links. Note: Any commits/push recorded on Git after the submission deadline will be excluded from the final evaluation.

The remaining 10% of the total grade will be evaluated based on class participation of the student. At the start of every class, we will discuss any questions on the topics covered during the previous class. All students are not only expected to build their group projects but also actively provide feedback to fellow students and participate in class discussions for the 10% grade.

Submission deadline / Late submissions:

You must submit your assignment before the class starts on the day when the assignment is due (refer to the weekly schedule for reference). Your submission should be complete for evaluation i.e., includes all files uploaded to MyCourses, push codes to Git repository and fulfilling any/all other requirements provided in the submission guidelines on MyCourses. **The final submission deadline (date & time) will also be posted on MyCourses.**

Late submissions without prior approval will not be accepted, and will receive a grade of zero (0). Extensions will be granted only on a case-by-case basis and under exceptional circumstances. Extensions must be REQUESTED AND APPROVED via email at least 48 hours before the assignment is due.

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.

EVALUATION CRITERIA

The groups will be evaluated collectively. The breakdown below is only to provide an overview of evaluation criteria. Detailed guidelines will be posted on MyCourses and/or emailed to students later.

1. Website Proposal (10%)
   - 5 Points for creativity
   - 5 Points for clarity of description in written document

2. Design Kit (10%)
   - 3 Points for Sitemap (Include full menu navigation and sections/subsections listed)
   - 3 Points for Wireframe (Clarity of flow/functionality and proposed design layout)
   - 4 Points for Brand Kit (Logo Design, Colour selection relevance etc.)

3. Figma prototype (30%)
   - 10 Points for a fully functional prototype. More than 70% of the buttons/links should be working and landing on correct pages.
   - 10 Points for attention to details. Consistent font, design & using best practices for web-designing.
   - 10 Points for creative skills and innovative ideas.

4. Final submission (40%)
   - 5 Points for a functional website.

10 Points for design implementation.
10 Points for following best practices in web programming.
15 Points for implementing dynamic pages.

5. Class Participation (10%)
   10 Points for actively providing feedback to other students/groups on their projects and participating in discussions during the class hours.

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 in a respectful manner, 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 offenses 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 properly 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 and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright 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
Syllabus may change in the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.