

COURSE SYLLABUS

CMPT 281: WEBSITE DESIGN AND DEVELOPMENT

01— T/R 1:00-2:20pm Thorv 159

Instructor Information

Instructor Dr. Jason Bowey
Contact: Email: <mailto:jason.bowey@usask.ca>,
Office Hours: Location: Thorv 377.3,
Hours: TBD

Direct communication with instructor should be through email or messaging via Canvas. Expect a response within 1 business day in most cases. Response times on evenings, weekends, and holidays may be slower.

Catalogue Description

Introduction to design concepts and issues in the development of usable applications on the World Wide Web, including visual design concepts, the user-centered iterative design process, and development technologies that enable application development for the Web.

Prerequisite(s): CMPT 141.3 or CMPT 111.3
Class Time and Location:
Lecture: T/R 1:00-2:20pm Thorv 159
Tutorial: Thursday 9:00-9:50am Thorv S311
Thursday 9:00-9:50am Thorv S320
Friday 10:30-11:20am Thorv S311
Website: <https://canvas.usask.ca/courses/86941>

Learning Outcomes

By the completion of this course, students will be expected to:

1. Understand the basic structure of the internet as regards client side and server side programming, with practical emphasis on client side
2. Become familiar with the problems of communication with clients regarding design issues
3. Write HTML, CSS, and JavaScript to implement interactive website behaviour
4. Build a simple but complete (client side) website that organizes information effectively
5. Design a responsive website
6. Understand function versus fashion, usability versus style

Course Overview

This course is designed to give students a basic understanding of web development and a practical understanding of design philosophies and techniques. The course will include a balance of constructing websites, with an emphasis on front-end development (HTML, CSS, JavaScript) and design (i.e., visual design, layout, colour theory, prototyping, user evaluation, etc).

Students are expected to attend both lecture and tutorial, as these sessions will cover unique material that will be key for completion of assignments and exams. **Lectures** will alternate between technical topics and design topics (in general, technical topics will be covered on Tuesdays, and design topics will be covered on Thursdays), with an emphasis on practical examples and exercises. Students are expected to complete the assigned textbook readings prior to attending the lecture.

Tutorials will be held in the Spinks computer labs and consist primarily of the students working through a small assignment to practice the technical and design skills learned in lectures, guided by the TAs. Each of these assignments will be due by Sunday at midnight. Since these assignments will be relatively short and students are expected to complete them during their assigned tutorial time, no extensions will be permitted for these assignments.

The **midterm exam** is scheduled for Thursday October 24. The exam will be written in person, during the regularly scheduled class time. More information on the midterm exam will be provided on Canvas leading up to this date. The **final exam** will be scheduled during the final exam period (December 7-23); the exam will be in-person, 180 minutes in length, and students must start and end within the scheduled timeslot.

There will be 2 assignments, which are to be completed individually. One assignment will evaluate students' understanding of basic web technologies covered in the course (i.e., HTML, CSS, JavaScript). The second assignment will evaluate students' understanding of design skills taught in the course (e.g., layout, prototyping, evaluation, colour theory).

There will be one project which will consist of 2 main components: a design journal and a multi-page website.

Lectures will not be recorded, and students are not allowed to record lectures without permission from the instructor.

Class Schedule

Table 1: Class Schedule

<i>Week</i>	<i>Topic/Subtopics</i>	<i>Tutorial</i>	<i>Activities</i>
Sept 4-6	Administration	None	
Sept 9-13	Introduction to the web	None	
Sept 16-20	HTML 1, Design and Layout	T1: HTML	
Sept 23-27	HTML 2, Wireframing	T2: A Basic Website	
Oct 1-4	CSS 1, Colour Theory	T3: CSS	
Oct 7-11	CSS 2, Heuristic Evaluation	T4: Navbar	A1 Due
Oct 15-18	JavaScript 1, Portfolios	T5: JavaScript	
Oct 21-25	JavaScript 2	None	MIDTERM Oct 24
Oct 28-Nov 1	Javascript 3, The Design Process	T6: JavaScript	A2 Due
Nov 4-8	Javascript 4, Web Hosting	T7: Wireframing	Design Journal Due
Nov 11-15	BREAK		
Nov 18-22	Special Topics	T8: Heuristic Evaluation	
Nov 25-29	Special Topics	T9: Peer Evaluations	
Dec 2-5	Special Topics, Course Review	Help Desk	Final Project Due

Midterm and Final Examination Scheduling

Midterm and final examinations must be written on the date scheduled.

Final examinations may be scheduled at any time during the examination period (December 7-23); students should therefore avoid making prior travel, employment, or other commitments for this period. A student is unable to write a final examination through no fault of his or her own for medical or other valid reasons, documentation must be provided and an opportunity to write the missed exam *may* be given. Students are encouraged to review all examination policies and procedures: <http://students.usask.ca/academics/exams.php>.

In the College of Arts and Science, all missed final exams are handled by the Dean's office, pursuant to the deferred and supplemental examination policy. Currently the regulations specify that an application must be made within three working days of the missed examination, with supporting documentation uploaded within five working days. The supporting documentation must show an extenuating circumstance: "a situation or challenge beyond the student's control that negatively affects the student's well-being and lowers their typical level of functioning." Examples of justifiable absences are given at the link here: <https://artsandscience.usask.ca/academics/advisor/student-requests/deferred-exams.php>.

Note that AES accommodations for examinations are separate from this scheduling policy. Students are reminded that they must register with AES in order to obtain accommodations, and that they must adhere to

the **AES deadlines**: currently, requests for midterm exam accommodations must be made 14 days prior to the scheduled exam date; and by November 19 for final exams.

Length and Mode of Final Examination

The final exam will be in-person, as scheduled by the Registrar. The examination will be 180 minutes long and similar to the midterm exam. There will be a mix of question types, including multiple choice, short answer, programming, and design.

Required Activities Outside of Class Time

There are no required activities outside of class time.

Required (and other) Resources

Required Texts

Required Resources

Most class materials will be made available on Canvas. Students are expected to use the department git server (<https://git.cs.usask.ca>) for all classwork. Some assignments or projects may require git logs or access to the repositories as a graded component.

Downloads

No particular software is required for this course, but students will need access to a basic text editor to complete coursework.

Recommended Texts

[1] Connolly, Randy. *Fundamentals of Web Development*. Pearson, 2022.

Bookstore Link: <https://shop.usask.ca/Item/item/9780135863497/course/UOFS,202409,CMPT,CMPT281,01>

Supplementary Resources

This course will teach the basic fundamentals of front-end web development, but students may desire additional practice beyond what is covered in tutorials and assignments. The following are some links to helpful tutorials or resources for extra practice:

- <https://www.w3schools.com/html/default.asp>
- <https://www.w3schools.com/css/default.asp>
- <https://www.w3schools.com/js/default.asp>

1 Assessment Details

Grading Scheme

Assessments that will contribute to your overall grade are shown below in Table 3. Please note that intangibles may be considered in the determination of your grade, and that assignment dates are approximate, and may change based on class progress. All students must be properly registered in order to attend lectures and receive credit for this course.

Table 3: Grading Scheme

<i>Item</i>	<i>Description</i>	<i>Weighting</i>
Lab Assignments		5%
Assignments		10%
Design Journal		15%
Final Project		20%
Midterm Examination	Oct 24 during lecture	20%
Final Examination	(180 minutes)	30%
<i>Total</i>		100%

Some of a student's course work may be reviewed by other students in the course for the purposes of practicing design skills such as layout, colour theory, heuristic evaluation, etc.

Evaluation Components

Assignment 0: Canvas and Academic Misconduct

Value: 0% of the final grade

Due Date: None

Description: Students will complete the University's Academic Misconduct Tutorial and submit the corresponding certificate. Please note that while this assessment does not have an official due date, all other course assessments will be inaccessible until this assessment is completed.

Assignment 1: Practicing Design

Value: 5% of the final grade

Due Date: October 13, 2024

Description: Students will be provided with a number of visual media (e.g., websites, brochures, posters, etc) and will answer questions regarding the design skills and terminology discussed in class (e.g., use of layout, usability, colour theory, etc). Additionally, students will be asked to provide suggestions on how the designs could be improved, and construct mockups demonstrating their suggested alterations.

Assignment 2: JavaScript Assignment

Value: 5% of the final grade

Due Date: November 3, 2024

Description: This assignment will require students to produce a simple one-page website that combines JavaScript functions, HTML, and CSS.

Design Journal

Value: 15% of the final grade

Due Date: November 10, 2024

Description: This assignment will require students to compile a document that details their final project's design process.

Final Project

Value: 20% of the final grade

Due Date: December 5, 2024

Description: This assignment will require the design and development of a multi-page website. The project will synthesize and demonstrate all of the learning outcomes from the course.

Midterm Exam

Value: 20% of the final grade

Date: October 24, 2024

Length: 80 minutes

Type: Written, closed book, in-person, during regular lecture time

Description: A mix of multiple choice, written, design, and coding question.

Final Exam

Value: 30% of the final grade

Date: Scheduled by the registrar

Length: 3 hours

Type: Written, closed book, in person

Description: A mix of multiple choice, written, design, and coding question.

Submitting Assignments

Assignments should be submitted to Canvas for grading, but students are also expected to make use of the department git server (<https://git.cs.usask.ca>). Some marks may be attributed to student's use of git. See assignment descriptions for specific details.

Late Assignments

Assignments will not be accepted after the due date, except in exceptional circumstances. If you anticipate that you will be submitting late, you should contact the instructor as soon as possible.

Criteria That Must Be Met To Pass

There are no special requirements to pass the course.

Attendance Expectation

There are no attendance requirements that must be met in order to pass. Attending lectures is strongly encouraged.

Experiential Learning

Grading Concerns

Please contact the instructor regarding any assignment marking concerns. Please note that should your concern be a comparison with another's work, both must be submitted for regrading: we reserve the right to re-grade your work and the other's work. Furthermore, the instructor will re-grade the entire work, not just selected portions.

Persuant to [Academic Appeals policy](#), no complaints will be accepted or investigated unless received less than 30 days after the grade is posted for the work.

Recording of the Course

Recording of lectures will only be allowed in certain circumstances. Please see the instructor for information on how to received approval.

Copyright

*Course material created by your professors and instructors is their intellectual property and **cannot be shared without written permission**. This includes exams, PowerPoint/PDF lecture slides and other course notes. If materials are designated as open education resources (with a creative commons license) you can share and/or use them in alignment with the **CC license**. Other copyright-protected materials created by textbook publishers and authors may be provided to you based on license terms and educational exceptions in the **Canadian Copyright Act**.*

You are responsible for ensuring that any copying or distribution of materials that you engage in is permitted by the University's **Use of Materials Protected By Copyright Policy.** For example, posting others' copyright-protected materials on the open internet is not permitted by this policy unless you have copyright permission or a license to do so. For more copyright information, please visit <https://library.usask.ca/copyright/students/index.php> or contact the **University Copyright Coordinator** at 306-966-8817.d

Student Feedback

You will be provided opportunities throughout the term to provide feedback about the course. This will include the use of the University administered course feedback system, SLEQ, at the end of term, and less formal methods. I value this feedback and use it to modify and improve the course to best meet student learning needs.

Academic Integrity

The University of Saskatchewan is committed to the highest standards of **academic integrity and honesty**. Students are urged to read the **Regulations on Academic Misconduct** and to avoid any behaviour that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence.

For help developing the skills for meeting academic integrity expectations, see <https://academic-integrity.usask.ca/students.php>.

Students are encouraged to ask their instructors for clarification on academic integrity requirements.

All students are encouraged to be aware of the rules for courses set out in the University **Academic Courses Policy on Class Delivery, Examinations, and Assessment of Student Learning**.

Students in this course are required to show a completion certificate for the **Academic Integrity Tutorial**. All course online course assessments (i.e., assignments, projects, tutorials) will be inaccessible until this certificate is submitted.

Artificial intelligence text generator tools (also known as large language models) are not permitted to be used in any assessments for this course. Any use of such tools will be considered academic misconduct in this course.

No GenAI Use	Idea generation, structuring	Editing assistance	Task completion	Full GenAI use
Permitted uses (see examples attached, adapt to be specific to your assessment)				
<input checked="" type="checkbox"/> Show understanding, knowledge, skills without GenAI assistance in any form or at any time in process	<input type="checkbox"/> Generate examples, explanations, steps or lists to help approach learning or research <input type="checkbox"/> Create outlines, suggest structure or format <input type="checkbox"/> Select from ideas produced by GenAI <input type="checkbox"/> (other)	<input type="checkbox"/> Adjust or regenerate text according to criteria <input type="checkbox"/> Format from scratch or revise existing format <input type="checkbox"/> Translate languages or change tone or level of language <input type="checkbox"/> (other)	<input type="checkbox"/> Produce content for specific purpose <input type="checkbox"/> Conduct analysis or according to frameworks or themes <input type="checkbox"/> Code or design processes <input type="checkbox"/> (other)	<input type="checkbox"/> Co-create using both GenAI and human capacities <input type="checkbox"/> Produce finished products (other)
Acknowledgement practices (check what applies, see web resource)				
<input checked="" type="checkbox"/> Statement of non-use <input type="checkbox"/> Statement of permitted use <input type="checkbox"/> Cite using provided format				

Students wanting to connect their assessment in this course to assessments they have completed in another course must get explicit permission of the instructor in order to avoid potential academic misconduct of self-plagiarism.

Collaboration Policy

You may neither possess work from other students (including those not enrolled in this course) nor share your work (rough drafts, finished answers, or graded assignments) with another student at any time during the course: **before and after** any assignment is due. Study groups and group discussion are encouraged; but if you plan to employ these then you must adhere to a strict *no-recording* policy:

Collaboratively, you may discuss and sketch on a non-permanent surface (e.g. whiteboard), but no written-on-paper and no typed-into-computer activities are allowed. Every student must leave the discussion without a record (no written notes or printed document, no computer file, no photograph, and no audio/video recording) and must reproduce the result from their own memory. The impermanent surface must be erased before leaving the discussion and commencing to construct your answer.

Information found online can be used for understanding only, essentially as a mechanical collaborator in the policy above. But, you cannot submit anything you find online as your own work, and you must complete your own work without referring to the online information once you've started writing your answer. If you need to refer back to the online information, you must erase your partial answer and reconstruct it again *ab initio*, after closing access to the online information and deleting any copy of it.

Offering another's work (especially that found online) as your own is academic misconduct. If you afford yourself the benefit of the *no-recording* policy and discuss with others, you must identify in your submission, all of the individuals with whom you discussed the work, and identify any online sources you consulted. Furthermore, one student's unauthorized possession of other students' work (even after the due date) is also *prima facie* evidence of academic misconduct on the part of both students, even if one is not registered in this class.

Access and Equity Services (AES) for Students

Access and Equity Services (AES) is available to provide support to students who require accommodations due to disability, family status, and religious observances.

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Access and Equity Services (AES) if they have not already done so. Students who suspect they may have disabilities should contact AES for advice and referrals at any time. Those students who are registered with AES with mental health disabilities and who anticipate that they may have responses to certain course materials or topics, should discuss course content with their instructors prior to course add / drop dates.

Students who require accommodations for pregnancy or substantial parental/family duties should contact AES to discuss their situations and potentially register with that office.

Students who require accommodations due to religious practices that prohibit the writing of exams on religious holidays should contact AES to self-declare and determine which accommodations are appropriate. In general, students who are unable to write an exam due to a religious conflict do not register with AES but instead submit an exam conflict form through their PAWS account to arrange accommodations.

Any student registered with AES, as well as those who require accommodations on religious grounds, may request alternative arrangements for mid-term and final examinations by submitting a request to AES by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by AES.

In particular, assignment accommodations are expected to be exercised occasionally (i.e. not for every assignment) and with a minimum of 24 hours notice before the deadline. Otherwise, the occurrence will be addressed as an *acute* situation, just like any other student submitting late. If AES cannot provide an accommodation, e.g. a lab computer customized for CompSci lab exams isn't available in a private room and for extra time, and the department or course-structure cannot accommodate it either, e.g. the flipped classroom cannot allow extensions on pre-class-time coursework, then the student is out-of-luck: they can choose to withdraw from the course or accept the obstacles and do the best they can.

Student Supports

Academic Help — University Library

Visit the [University Library](#) and [Learning Hub](#) to find supports for undergraduate and graduate students with first-year experience, study skills, learning strategies, research, writing, math and statistics. Students can attend [workshops](#), access [online resources and research guides](#), book [one-on-one appointments](#) or hire a [subject tutor](#) through the [USask Tutoring Network](#).

Connect with library staff through the [AskUs](#) chat service or visit various [library locations](#) on campus.

Enrolled in an online course? Explore the [Online Learning Readiness Tutorial](#).

Teaching, Learning and Student Experience

The Teaching, Learning and Student Experience unit (TLSE) focuses on providing developmental and support services and programs to students and the university community. For more information, see the [student's web site](#).

College Supports

Students in Arts and Science are encouraged to contact the Undergraduate Student Office and/or the Trish Monture Centre for Success with any questions on how to choose a major; understand program requirements; choose courses; develop strategies to improve grades; understand university policies and procedures; overcome personal barriers; initiate pre-career inquiries; and identify career planning resources. Contact information is available at the [UnderGraduate Student Office](#).

Financial Support

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact [Student Central](#).

Gordon Oakes Red Bear Student Centre

The Gordon Oakes Red Bear Student Centre is dedicated to supporting Indigenous student academic and personal success. The Centre offers personal, social, cultural and some academic supports to Métis, First Nations, and Inuit students. The Centre is an intercultural gathering space that brings Indigenous and non-Indigenous students together to learn from, with, and about one another in a respectful, inclusive, and safe environment. Visit <https://students.usask.ca/indigenous/index.php>; or students are encouraged to visit the [GORBSC's website](#).

International Student and Study Abroad Centre

The International Student and Study Abroad Centre (ISSAC) supports student success and facilitates international education experiences at the University of Saskatchewan and abroad. ISSAC is here to assist all international undergraduate, graduate, exchange and *English as a Second Language* students and their families in their transition to the University of Saskatchewan and to life in Canada. ISSAC offers advising and support on matters that affect international students and their families and on matters related to studying abroad as University of Saskatchewan students. Please visit <https://students.usask.ca> for more information.

Treaty Acknowledgment

As we gather here today, we acknowledge that the Saskatoon campus of the University of Saskatchewan is on Treaty Six Territory and the Homeland of the Métis. We pay our respect to the First Nation and Métis ancestors of this place and reaffirm our relationship with one another. We recognize that, in the course of your studies, you will spend time learning other traditional territories and Métis homlands. We wish you safe, productive, and respectful encounters in these places.

Acknowledgements

This syllabus is constructed around M. Dahl's excellent template distributed to the College.