

Concordia University
SOEN 287: Web Programming
Winter 2018
Course Outline/Syllabus

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| Instructor | Section W: Dr. Kaustubha Mendhurwar E-mail: kaustubha.mendhurwar@concordia.ca Office: EV 3.231 Tel: (514) 848-2424 ext. 3969 Lecture: Tuesday-Thursday – 14.45 – 16.00 at FG B060 Course Website: Moodle Office Hours: Tuesday 13.30 – 14.30 2) By appointment (send e-mail) |
| Instructor | Section W: Dr. Mohamed Taleb E-mail: mtaleb@encs.concordia.ca Office: EV 3.233 Tel: (514) 848-2424 ext. 7952 Lecture: Tuesday-Thursday – 08.45 – 10.00 at FG B060 Course Website: Office Hours: Tuesday 13.30 – 14.30 2) By appointment (send e-mail) |
| Instructor and Coordinator | Section W: Dr. Javad Sadri E-mail: j_sadri@encs.concordia.ca Office: EV 3.233 Tel: (514) 848-2424 ext. 8743 Lecture: Tuesday-Thursday – 14.45 – 16.00 at H-533 Course Website: https://users.encs.concordia.ca/~s287_4/ Office Hours: Tue/Thu 16.10 – 17.00 2) By appointment (send e-mail) |
| Lab Instructors and Markers | Please visit the website for your section for detailed information on lab instructors/tutors/markers as well as lab/tutorial times and locations |

Background Knowledge

Prerequisite: COMP 248 Object-Oriented Programming I.

You should have basic programming skills; in particular, you should have a good understanding of expressions, statements, methods, parameters, and arrays. You are assumed zero background on Web programming.

Course Objectives and Content

This is an introduction course on Web programming.

The course will include discussions and explanations of below mentioned topics: Internet architecture and protocols, web applications through clients and servers, markup languages, client-side programming using scripting languages, static website contents and dynamic page generation using server-side programming, preserving state (client-side) in web applications.

Lectures: three hours per week. **Tutorials:** two hours per week.

Please note, Web programming and Web application is a very wide domain. Many techniques are used to build a complex online business system. The following topics are NOT covered in this course, but in some other courses:

- J2EE, JSP, Servlet, (SOEN 387), Web services (SOEN 487)
- Security (SOEN 321)
- Enterprise level systems and applications (SOEN 387, SOEN 487)
- Database and SQL (COMP 353)

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

- CLO 1. Have gained factual knowledge on Web site development.
- CLO 2. Be able to analyze and evaluate different technical solutions when developing a Web site and apply the learned techniques properly.
- CLO 3. Be able to cultivate creative and innovative ideas when developing Internet applications.

CEAB Attribute Assessment

As part of either Computer Science or Software Engineering program curriculum, the content of this course includes material and exercises related to the teaching and evaluation of graduate attributes. Graduate attributes are skills that have been identified by the Canadian Engineering Accreditation Board (CEAB) and the Canadian Information Processing Society (CIPS) as being central to the formation of engineers, computer scientists and information technology professionals. As such, the accreditation criteria for Software Engineering and Computer Science programs dictate graduate attributes are taught and evaluated in the courses. The following is the list of graduate attributes covered in SOEN287, along with a description of how these attributes are incorporated in the course:

- **Knowledge-base:** Internet architecture and protocols. Web applications through clients and servers. Markup languages. Client-side programming using scripting languages. Static website contents and dynamic page generation through server-side programming. Preserving state (client-side) in web applications. (CLO 1)
- **Design:** Design and implementation of web-based systems using different basic architectures and design principles. (CLO 2)
- **Use of Engineering tools:** Use of appropriate software development tools and languages to develop web applications on client and server side. (CLO 3)

Required Text Book

Programming the World Wide Web by Robert W. Sebesta, 8th edition, Pearson, 2015. The book is available in 2 formats:

- Hard Copy: ISBN: 978-0-13-377598-3
- Digital Copy: ISBN: 978-0-13-377612-6

Computing Facilities

You should obtain a computer account, if you don't already have one, from the help desk at H-960 or EV-007.182. This account will give you access to the laboratories. For more information on CSE Computer accounts please visit the website: <http://www.encs.concordia.ca/helpdesk/access.html>.

If you have a computer at home and prefer to use it, you may do so.

Tutorials

Tutorials will take place every week. Tutorial attendance is strongly encouraged. The tutorials will reinforce the material seen during the lectures with examples and practical exercises. Tutorials are always in a lab. **You are allowed to use your own laptop in the tutorial sessions to profit from your own settings in your computer.**

Assignments/Examinations

a) Assignments.

There will be a maximum of 3 assignments. Assignment descriptions are made available on the course webpage. All assignment questions must be downloaded from the course web page and submitted only electronically. The instructions on submitting assignments will be available on the course web page.

Submission format: All assignment-related submissions must be adequately archived in a ZIP file using your ID(s) and last name(s) as file name. The submission itself must also contain your name(s) and student ID(s). Use your “official” name only-no abbreviations or nick names; capitalize the usual “last” name. Inappropriate submissions will be heavily penalized. Only electronic submissions will be accepted. Students will have to submit their assignments (one copy per group) using EAS/Moodle system depending on what is being used by the section. Assignments must be submitted in the right folder of the assignments. **Assignments uploaded to an incorrect folder will not be marked and will result in a zero mark. No late or resubmission will be allowed. Assignments must be demoed to TAs or you will get zero for it.**

Notes:

1. Backups: You are advised to retain a copy of all your work for assignments until you receive your final grade for the course.
2. Cheating, or plagiarism: Please pay attention to the parts concerning cheating, plagiarism, and possible consequence of violating this code. Sharing codes, design diagrams, algorithms, etc. amongst teams or taken from elsewhere (without proper citation) is not permitted. No need to mention that one learns little from copying others’ work. Although we encourage discussion of the assignment questions among students, you should be aware of the university regulations concerning plagiarism described in 16.3.13 of the undergraduate Calendar. All students should become familiar with University’s Code of Conduct which can be found at: <https://www.concordia.ca/students/academic-integrity/offences.html>. In cases where cheating or plagiarism is suspected, the case will be forwarded directly to the appropriate university office for consideration. Please do not assume that you get “second chances” when it comes to cheating. Once is often enough to damage your academic career.
3. Recommendation: We highly recommend collaborative learning in this course for better preparation. This is encouraged also when doing the assignments. It is also recommended that you start working on the course assignments as early as possible!

b) Examinations

- There will be one midterm exam. It will be held during regular lecture hours.
- Final Examination: The final examination lasts three hours, and will be administered during the examination period at the end of the term. The final examination covers all material seen during the term. The date, and the time of the final exam will be announced by the exam office.
- **There’s no make-up for a missing midterm exam or missing final exam.**

Evaluation Scheme

| | | |
|----------------|-----|----------------------------|
| 3 Assignments | 30% | $8\% + 11\% + 11\% = 30\%$ |
| 1 Midterm Exam | 30% | |
| 1 Final Exam | 40% | |

1. In order to pass the course, you must pass the final exam by getting over 50% of the marks, regardless of your grade in other required components, submit at least 60% of the assignments, and attend both the final and midterm exams.
2. There is no standard relationship between percentages and letter grades assigned, and Letter grade distribution is based on the average of the class which is B-.
3. Although we encourage discussion of assignment questions among students, you should be aware of the University's regulations concerning plagiarism described in 16.3.13 of the undergraduate Calendar. All students should become familiar with the University's Code of Conduct which can be found at: <http://www.concordia.ca/students/academic-integrity/code.html>. In cases where cheating or plagiarism is suspected, the case will be forwarded directly to the appropriate university office for consideration. Please do not assume that you get "second chances" when it comes to cheating. Once is often enough to damage your academic career.

How to study in this course:

- If certain concepts are unclear to you, seek help right away. Ask your TA during the tutorial and/or your instructor for help. Make use of your instructor's office hours; book an appointment with your instructor if the office hours are not suitable.
- Programming is not a "spectator sport". You need to get your hands dirty by trying the examples discussed in class and doing the assignments.

Classroom behavior

- Please arrive on time, as late arrivals are distracting to your peers.
- NO cell phones or pagers. If your cell phone or pagers ring during class, you will be asked to leave the classroom for the rest of that class period.
- No walking in and out of the classroom once class has been started.

TENTATIVE SCHEDULE

The list below provides a summary of the material that will be covered during the course as well as a tentative schedule. Please note that this list is not inclusive: I may occasionally cover materials that are not provided in this list. It is also possible that topics maybe covered in a slightly different order than that described in this table. Please check your course webpage for any changes or more details of the lecture notes.

| Chapter | Topics |
|---------|---|
| 1 | Fundamentals |
| 1, 2 | Fundamentals, XHTML |
| 2, 3 | XHTML, CSS |
| 3, 4 | CSS, JavaScript |
| 4, 5 | JavaScript |
| 5, 6 | JavaScript, Dynamic XHTML with JavaScript |
| 6 | Dynamic XHTML with JavaScript |
| 6 | Dynamic XHTML with JavaScript |
| 9 | PHP: syntax, form handling |
| 9 | PHP: patterns, File I/O, cookies |
| 9 | PHP: sessions |

Note from University Administration

"In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change".

Special Needs:

If you have any special needs please contact your instructor to arrange a time to discuss the situation.

Academic Support:

If you are experiencing difficulties that are affecting your studies, Concordia offers many on-campus free of charge services. You can find the list at the following page <http://www.concordia.ca/content/concordia/en/students/>