



University  
of Windsor

COMP-8347

Internet Applications and Distributed  
Systems  
Fall 2023

SCHOOL OF COMPUTER SCIENCE

COURSE SYLLABUS

LAND ACKNOWLEDGEMENT

*The University of Windsor sits on the traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwa, the Odawa, and the Potawatomi. We respect the longstanding relationships with First Nations people in this place in the 100-mile Windsor-Essex peninsula and the straits – les détroits – of Detroit*

INSTRUCTOR:

**Dr. Saja Al-Mamoori**

**E-mail:** sajak@uwindsor.ca

**Office Location:** Office # 4004 at 300 Ouellette

**Office Hours:** Monday from 10:30AM to 12:30PM

*Note: Only email originating from a valid University of Windsor student account will be accepted from students wishing to contact the instructor or use the Brightspace email tool within the course site. Please include your full name, student ID and related course section in your correspondence. Do not spam with multiple or lengthy emails. Should you not receive timely feedback to your inquiries reach out during office hours directly, or in the event of no response contact the CS office at [csinfo@uwindsor.ca](mailto:csinfo@uwindsor.ca) for support to access the instructor.*

\*The course outline that is available after the end of second week of semester will be deemed correct and official. \*

***Never used Microsoft Teams before?***

*Download the free MS-Teams client for your device and login using your UWindsor account (uwinid). There are two ways to reach me, one using the direct chat to Usama Mir and another to our class group if you like to connect with your peers. It is a simple messenger type application allowing you to do chat, voice and video conferences with your prof and fellow students.*

[Getting Started - Students | Information Technology Services \(uwindsor.ca\)](#)

TEACHING  
ASSISTANT(S):

*Please refer to the Brightspace for the TA/GA contact information and updated office hours.*

The teaching assistant(s) will be holding regular weekly office hours dedicated to help students. It is highly recommended that you take advantage of this resource by seeking interactive assistance towards understanding the course materials and guidance for completing the homework. Graders are also accessible to review your graded work and help make corrections or fix grading errors.

If you are facing difficulties in the course, please contact the instructor or the teaching assistant(s). You are expected to spend sufficient time to complete all the readings and the assigned work.

If you are not able to get hold of the teaching assistant(s) during posted office hours, or do not get timely response from them please report the matter promptly to the course instructor with the situation details.

If you identify an exceptional assistant who goes above and beyond, please inform the instructor and consider nominating the person for related university/faculty awards for their commitment.

The School of Computer Science provides free tutoring services for all Undergraduate Students

[Home Page – CS Current CS Current Students \(uwindsor.ca\)](#)

PRE-REQUISITES:

NA

*No student is allowed to take a course more than two times without permission from the Dean.*

LECTURES/LABS:

Thursday (Sec 1) and Wednesday (Sec 2) – 11:30AM to 02:20PM

COURSE  
DESCRIPTION\*:

This course will introduce students to the latest tools and technologies for developing internet applications. Topics covered may include a review of client/server models and applications, multi-tier software architecture, content management systems, dynamic server-side applications, principles of parallel programming and distributed systems and techniques for solving complex problems using distributed systems. *This course is restricted to students in the Master of Applied Computing program.*

*\*This description is from the official senate-approved calendar*

**LEARNING  
OUTCOMES:**

(source: <https://ctl2.uwindsor.ca/cuma/public/courses/pdf/b8e5151e-246b-494c-a358-a8668a0e2d9a> )

**At the end of the course, the successful student will know and be able to:**

Students will gain hands-on experience in developing dynamic web applications. The students will learn about industry accepted web frameworks and how to use them to develop and modify internet applications. Several different aspects of web development will be covered including HTML/CSS, working with templates, creating appropriate database models and querying and updating databases in response to user requests. Students will also learn about user authentication systems, how to implement login/logout functionality, restrict access to specific pages, and store information in cookies and/or user sessions.

Note: Students are strongly encouraged in participating in the course development and update process. Please feel free to make recommendations for changes of the Learning Outcomes, Course Description, and Course Topics to the instructor or the program chair.

**REQUIRED  
TEXTBOOK:**

There is no required textbook for this course. Some useful books on the subject include:

- Web Development with Django: Learn to build modern web applications with a Python-based framework, by Ben Shaw, 2021.
- Django Essentials, by Samuel Dauzon, 2014.
- The Definitive Guide to Django: Web Development Done Right, by Katie Cunningham Adrian Holovaty, and Jacob Kaplan-Moss, 2014.
- Introduction to Programming using Python, by, Y. Daniel Liang, 1<sup>st</sup> Edition.
- Programming in Python 3: A Complete Introduction to the Python Language, by Mark Summerfield, 2009.
- Campus Bookstore: <https://www.uwindsor.ca/bookstore/>
- Luddy Library: <https://luddy.uwindsor.ca/>

**COURSE  
EVALUATION:**

In-class Quizzes ( <b>Individual</b> )	2 (10%)
Labs/Assignments ( <b>Group Except Lab 1</b> )	9 (20%)
Seminars ( <b>Individual</b> )	At least 10 (5%)
Class Attendance ( <b>Individual</b> )	10%
Final Project ( <b>Group</b> )	20%
Final Exam ( <b>Individual</b> )	35%

**Tentative Dates**

**Quizzes:**

In class as scheduled. Date will be announced one week prior to each quiz. These quizzes will be conducted in any or all of the following formats:

- On paper in the form of MCQs
- On paper in the form of long questions
- On computers/laptops in any of the above forms
- On computers/laptops based on any online material/video

**Labs/Assignments:**

To be submitted by the end of Tuesday. for Sec.2, and Wednesday. for Sec.1. The exact due dates for all the labs/assignments will appear on Brightspace with the labs descriptions. Starting from Week 1, for most of the labs/assignment, 50% of each lab/assignment will be solved by the students in the second half of the lecture. Later, rest of the lab/assignment (including the part solved during the lecture) will be submitted on Brightspace before the due date. The grading for the labs will be done via oral exam/viva during the ongoing or upcoming lecture. The group size is 4 students (mandatory). Only one submission per group is allowed (except for Lab 1 on which you work individually in the class and show the completion to your Instructor/GA before the end of the class). The groups must be formed on Brightspace by **the end of Week 1**.

**Seminars:**

To receive your participation marks. You are required to attend a total of 10 Seminars/Workshops (CS Workshops, Colloquiums, and Thesis defence or proposal) during the Fall 2023 term. You will be required to register for the event, sign in and complete the QR code after the event. The attendance will be tracked by the Admin staff and will be provided to the instructors at the end of the term to calculate your participation marks.

**Class Attendance:**

To score in class attendance, you need to be fully present in all the lectures and labs. Instructor/GA reserves the right to call for the attendance at any time during the first hour of the lecture or later (depending on the situation). This grading is also done based on your

participation in the lecture. Instructor reserves the right to mark a student absent if the student is not focusing on the lecture or disturbing the other students in the class. Instructor reserves the right to make amendments to this grading activity as the semester progresses. Further details about this grading activity will be provided during lecture 1.

**Final Project:**

This is a group activity. The students should form a group of minimum **6** persons and maximum **7** persons (Ex. If the class strength is 40, then 4 groups of 7 students and 2 groups of 6 students will be formed). Further details about the project will be provided in Week 2 on Brightspace. The due date for the project submission will be the **Sunday of Week 10**. The groups must be formed by the **Sunday of Week 2**.

**Final Exam:**

**TBA**

*Please note that the above dates and information are subject to change. However, any changes made by the instructor will be conveyed to the students prior to the activities. Instructor reserves the right to make changes to any of the above grading schemes. Ex. More marks can be allocated for quizzes and less marks can be given to the labs.*

*Grade curving: In certain circumstances, due to the difficulty/nature of the course activities, marks of assessments may be translated or curved using a gaussian distribution, to make sure that all students are fairly evaluated by all the instructors (especially when the distribution around the mean is not uniform or if the mean does not represent the average level of expected skills at the end of the term). Internal components of scheme may also change at the discretion of the instructor. Ex 1. For the project activity, more weightages can be given to the viva/oral exam and less to the presentation and so on.*

**COURSE  
SCHEDULE:**

**Topics\***

(The instructor reserves the right to change the outline to accommodate student pace and understanding of the subject matter.)

Week	Topics
1-2	Introduction to Python
3	HTML/CSS, Dynamic Web, Web Frameworks
4	Creating DB Models/Objects, Querying DB using Manager Class
5	Reading Week
6	Simple View Functionality
7	Working with Templates, Custom Templates, and Template Inheritance
8-9	Processing Forms, Form and ModelForm classes
10	User Authentication, User Sessions and Cookies
11	Admin Interface
12	Project Presentations
13	Project Viva/Oral Exam + Final review

*\*Note: Students are advised that the schedule and topics described above are tentative and that the material and/or depth and order of presentation are subject to change at the discretion of the instructor and student pace.*

*This course assumes the student will allocate a significant amount of independent study and time spent on reading and researching materials as needed. You are strongly encouraged to ensure sufficient time needed to succeed in this course.*

**Fall 2023**

**IMPORTANT DATES:**

Thursday, September 7: First day of classes

Wednesday, September 20: Last day for late registration for Fall classes (to add classes)

Wednesday, October 4: Fall financial drop date.

Saturday, October 7 – Sunday, October 15: Fall Reading Week  
 Monday, October 9: Thanksgiving Day (Statutory Holiday – University closed)  
 Wednesday, November 15: Last day to voluntarily withdraw from Fall classes (to drop classes)  
 Wednesday, December 6: Last day of classes  
 Saturday, December 9 – Wednesday, December 20: Fall Final Exams  
 Thursday, December 21: Alternate Exam Day  
 Saturday, December 23 – Tuesday, January 2: University offices closed for December Holiday recess.

**RESOURCES:**

The course website is on <https://brightspace.uwindsor.ca/>  
 Please check it frequently for announcements and other useful info.  
 Additional Resources:

- <https://docs.python.org/3/tutorial/>
- <https://www.djangoproject.com/>
- <http://www.tangowithdjango.com/book17/>
- <http://tutorial.djangogirls.org/en/index.html>
- <http://www.effectivedjango.com/tutorial/>

**GRADING:**

A numeric grade on a scale of 0 to 100 will be assigned (rounded integer). Instructor reserves the right to perform relative/curved grading based on class overall grades.

***Passing grade:***

A minimum grade of 50% is required to pass this course (70% for grad courses). Your individual program may have higher requirements to maintain good standing; please consult your program requirements and plan accordingly. If you are registered in a course and do not attend or participate or write any evaluations will be assigned a grade of NR (No report). You must withdraw from the course if you do not wish to attend it; not showing up does not constitute withdrawal and will impact your academic record.

***Voluntary withdrawal (dropping the course):***

You may drop a course within the first 2 weeks add/drop period (1 week in case of 6-week courses) without it showing up on your academic record. Please check with the Registrar's office calendar on the important dates for withdrawing voluntarily from a course after the add/drop period should you feel you need to withdraw. It is strongly recommended that you seek academic advice from your instructor or an academic advisor prior to withdrawing from courses.

***Absences due to medical or other extenuating circumstances:***

Medical leaves, illness, death (in the family), and other difficult circumstances as determined in bylaw 54 are at times unavoidable and would interrupt your academic career. You must report any issues to the instructor as soon as possible prior to considering any academic accommodations. The instructor reserves the right to determine if an accommodation is merited and the nature of the accommodation related to the course evaluation. All requests for alternate considerations on medical grounds or other difficult matters must be made in writing (email) to the instructor along with supporting documents prior to the end of the course. No alternate accommodations will be considered after the end of the course.

***Makeup and missed assessment policy:***

If you miss a test, assignment, or other assessment in the course you will receive a zero mark for the missed work. If you wish to have alternate considerations due to a valid reason (as per senate bylaw 54) you must inform the instructor in writing (email) as soon as possible, preferably before the assessment, and not later than seven calendar days. Considerations for any make-up or late submissions will be done on a case-by-case basis on compassionate grounds while maintaining fairness as much as possible. No alternate considerations will be given to any missed assessment if the instructor is not informed within seven calendar days after its due date. The instructor will refuse any unsubstantiated and late requests.

***Grade appeal:***

Informal reviews and appeals of the marks for assignments, midterm, exams and/or projects will be considered only if requested within 10 days after the release of the corresponding grades. After the 10-day period students will have to submit a formal appeal if they wish within 6 weeks. See Senate Bylaws 54 (Undergraduate Students) and Senate Bylaws 55 (Graduate Students) for more details on appealing about grades.

***Other Notes:***

1.A. Undergraduate Students: (Please review Bylaw 54) The last seven calendar days prior to, and including, the last day of classes are free from any procedures for which a mark will be assigned. (Extensions on compassionate grounds

are excluded). (In the case six weeks courses, the last three calendar days before the start of the examination period are free from any assessment procedures).

1.B. Unannounced quizzes/graded activities will not exceed 5% of the final grade.

1.C. Participation marks in online courses will not exceed 20% of the final grade.

2. The final exam schedule is announced by the Registrar's office, normally after the add/drop period, and students are expected to be available for the entire exam period and not make any prior travel plans, vacations, or other commitments until after the exam dates are announced. No alternate exams accommodations will be made on those grounds.

3. No forms of assessment shall be scheduled or made-due on days identified as break days such as reading weeks, holidays, or days that the University is officially closed.

**SPTs:**

The Student Perceptions of Teaching (SPTs) forms will be administered in the last two weeks of classes for courses 12-24 weeks in duration, in the last week of classes for courses 6-11 weeks in duration, or in the last two days of classes for courses of 5 or fewer weeks in duration. Students should be provided with up to 15 minutes at the beginning of a class to complete the SPTs online. [Senate Policy](#).

**SUPPORT CONTACTS:**

The School of Computer Science has a team of support staff and access to student academic advisors to assist you through any inquiries you may have about our courses and programs. Please use one of the following emails:

For CompSci undergraduate programs and advising, including IT certificate: [csinfo@uwindsor.ca](mailto:csinfo@uwindsor.ca)

For CS Tutors (free tutoring support for all CS undergrad courses): <http://tutor.cs.uwindsor.ca/>

For Computer Science Society: <https://css.uwindsor.ca/>

For CompSci graduate programs (MSc, MSc-AI stream, and PhD): [csgradinfo@uwindsor.ca](mailto:csgradinfo@uwindsor.ca)

For CompSci professional graduate programs (MAC/MAC-AI stream): [macprogram@uwindsor.ca](mailto:macprogram@uwindsor.ca)

For the office of the Director of the School of Computer Science: [csdir@uwindsor.ca](mailto:csdir@uwindsor.ca)

For CompSci technical support: <https://help.cs.uwindsor.ca/>

For International Student Centre: <https://www.uwindsor.ca/international-student-centre/>

For Student Accessibility Services: <https://www.uwindsor.ca/studentaccessibility/>

For other general inquiries: <https://ask.uwindsor.ca/>

For Student counselling services (ext. 4616): <https://www.uwindsor.ca/studentcounselling/>

For Student health services (ext. 7002): <https://www.uwindsor.ca/studenthealthservices/>

For Student Peer Support Centre (ext. 4551): <https://www.uwindsor.ca/studentexperience/wellness/>

For USci Faculty of Science student support network: <https://www.uwindsor.ca/science/usci/>

***Need help?***

*My Student Support Program (MySSP) is an immediate and fully confidential 24/7 mental health support that can be accessed for free through chat, online, and telephone. This service is available to all University of Windsor students and offered in over 30 languages.*

*Call: 1-844-451-9700, or visit <https://myissp.com/>*

**STUDENT**

**ACCOMMODATIONS:**

***Students with disability:***

Students who require academic accommodations in this course due to a documented disability must contact an Advisor in Student Accessibility Services (SAS) to complete SAS Registration and receive the necessary Letters of Accommodation. After registering with SAS, you must present your Letter of Accommodation and discuss your needs with the course instructor as early in the term as possible. Please note that deadlines for the submission of documentation and completed forms to SAS are available on their website:

- <http://www.uwindsor.ca/studentaccessibility/>

***Exam conflicts:***

If you have a conflict with two exams at the same time, you will need to talk to both instructors and ask which one is willing to move your exam to a different day or time.

If you have a conflict with examinations due to the following reasons, view the [Office of Registrar Alternative Final Exam Policy](#):

- Conflict with religious conviction during the regularly scheduled time slot.
- Three or more final examinations in a 24-hour period.

***Religious Observances:***

Requests for accommodation of specific religious or spiritual observance must be presented to the instructor no later than 2 weeks prior to the conflict in question (in the case of final examinations within two weeks of the release of the examination schedule). In extenuating circumstances, this deadline may be extended. If the dates are not known well in advance because they are linked to other conditions, requests should be submitted as soon as possible in advance of the required observance. Timely requests will prevent difficulties in arranging constructive accommodations.

[religious accommodation for students.01mar2013.web ver.pdf \(uwindsor.ca\)](#)

**PRIVACY AND  
COPYRIGHTS:**

***Content confidentiality:***

Lectures, examinations, quizzes, assignments, and projects given in this course are protected by copyright. Reproduction or dissemination of examinations or the contents or format of examinations/quizzes in any manner whatsoever (e.g., sharing content with other students or websites), without the express permission of the instructor, is strictly prohibited. Students who violate this rule or engage in any other form of academic dishonesty will be subject to disciplinary action under [Senate Bylaw 31](#): Student Affairs and Integrity.

***Recording of lectures:***

Lectures and discussions can be recorded by requesting explicit permission from the instructor. Students planning to do so shall send a request (via email is sufficient) before the lecture is delivered. Students, however, are not allowed to post or share any recorded material to any other individual or party outside of this course.

See [Senate Policy on recording lectures](#).

**SAFETY, ACADEMIC  
INTEGRITY, AND  
NON-ACADEMIC  
MISCONDUCT:**

***Equity, Diversity, and Inclusiveness (EDI)***

This course, along with all its components such as lab sections are, without question, safe places for students of all races, genders, sexes, ages, sexual orientations, religions, disabilities, and socioeconomic statuses. Disrespectful attitude, sarcastic comments, offensive language, or language that could be translated as offensive and/or marginalize anyone are absolutely unacceptable. Immediate actions will be taken by the instructor to protect the safety and comfort of the students. An ethnically rich and diverse multi-cultural world should be celebrated in the classroom. The instructor, too, must treat every student equally and with the respect and compassion that all students deserve. Furthermore, UWindsor is committed to combatting sexual misconduct. All members are required to report any instances of sexual misconduct, including harassment and sexual violence, to the [Sexual Misconduct Response & Prevention Office](#) so that the victim may be provided appropriate resources and support options.

- <https://www.uwindsor.ca/sexual-assault/>
- For police/ambulance emergency call 911 (in Canada)
- For campus police call 519-253-3000 ext. 4444 for emergency, and 1234 for non-emergency issues.

***Academic Integrity***

Please refer to: <https://www.uwindsor.ca/academic-integrity/>

As defined in the University of Windsor's [Student Code of Conduct](#), plagiarism is the act of copying, reproducing or paraphrasing significant portions of one's own work, or someone else's published or unpublished material (from any source, including the internet), without proper acknowledgement, representing these as new or as one's own.

Tips and resources to help you prevent plagiarism:

[https://www.uwindsor.ca/academic-integrity/sites/uwindsor.ca/academic-integrity/files/tips\\_for\\_preventing\\_plagiarism.pdf](https://www.uwindsor.ca/academic-integrity/sites/uwindsor.ca/academic-integrity/files/tips_for_preventing_plagiarism.pdf)

The instructor will put a great deal of effort into helping students to understand and learn the material in the course. However, the instructor will not tolerate any form of cheating. The instructor will report any suspicion of academic integrity to the Director of the School of Computer Science. If sufficient evidence is available, the Director will begin a formal process according to the University Senate Bylaws which will lead to more review, a strict punishment if convicted, and a note on your permanent student record.

The following behaviours will be regarded as cheating:

- *Copying assignments or quizzes or presenting someone else's work as your own.*
- *Allowing another student to copy an assignment/project from you and present it as their own work; protect your own work and never share it with anyone!*
- *Copying from another student or any other unauthorized source during a test or exam.*
- *Falsifying your identity during the exam or having someone else assist or complete your assessment.*
- *Referring to notes, textbooks, and any unauthorized sources during a test or exam (unless otherwise stated).*
- *Speaking or communicating without permission during a test or exam.*
- *Not sitting at the pre-assigned seat during a test or exam.*
- *Communicating with another student in any way during a test or exam.*
- *Having unauthorized access to the exam/test paper prior to the exam/test.*
- *Explicitly asking a proctor for the answer to a question during an exam/test.*
- *Modifying answers after they have been marked.*
- *Any other behaviour which attempts unfairly to give you some advantage over other students during the grade-assessment process.*
- *Refusing to obey the instructions of the officer in charge of an examination.*

The list given above is not exhaustive. More examples are given in Appendix A, [Senate Bylaws 31](#) – Complete guidelines and procedures on the sanctions imposed by the university are also listed in Table A.1 of the [Senate Bylaws 31](#)

*In this course any assessment that is deemed plagiarized or in violation of the academic integrity policy will NOT BE GRADED and receive a grade of ZERO unless a different ruling is provided by the adjudication committee formally reviewing the case.*

Examples of sanctioning include: (from Table A.1 in Appendix A of Bylaw 31)

*For first offence: mark reduction up to zero, censure 6-12 months; and for subsequent offence: suspension 4-24 months, censure up until graduation.*

***Plagiarism detection software:***

Plagiarism-detection software *SafeAssign* will be used for all student assignments in this course. You will be advised how to submit your assignments. Note that students' assignments that are submitted to the plagiarism-detection software become part of the institutional database. This assists in protecting your intellectual property. However, you also have the right to request that your assignment(s) not be run through the student assignments database. If you choose to do so, that request must be communicated to the course instructor in writing at the beginning of the course. The instructor reserves the right to choose another plagiarism detection software and students would be notified of this once it is put in use.