Course Outline :: *Final version :: Last modified: December 16, 2025*

1. Course Information

Instructor:	Dr. Christine Laurendeau (she/her)	**Lectures**:	Tue / Thu 8:35 - 9:55 am
Email:	ChristineLaurendeau@cunet.carleton.ca	Tutorials:	posted in Brightspace
Office:	HP 5378	Classroom:	posted in Carleton Central
Office hours:	posted in Brightspace	Web site:	Brightspace
Teaching team:	posted in Brightspace		

Land acknowledgement: Carleton University acknowledges the location of its campus on the traditional, unceded territories of the Algonquin nation.

2. Course Description

This is an introductory course to the field of network computing. Topics include: protocol architectures and internetworking, types of networks, communication protocols, end-system and network traffic management, structure of routing and congestion control. Precludes additional credit for SYSC 3512, SYSC 4602.

Prerequisite(s): COMP 2401 with a minimum grade of C-, and COMP 2402.

3. Topics Covered

3.1. The course will cover the following topics (some material may be omitted due to time constraints): computer network introduction, application layer, transport layer, network layer, link layer and LANs, wireless and mobile networks, and network security.

3.2. *Estimated schedule*

Week	Tutorials	Dates	Course work	Topics
Wk01		Jan.06		Chapter 1: Computer networks introduction
		Jan.08		
Wk02	T01	Jan.13	A1 posted	
		Jan.15		
Wk03	T02	Jan.20		Chapter 2: Application layer
		Jan.22	A1 due	
Wk04	T03	Jan.27		Chapter 3: Transport layer
		Jan.29		
Wk05	T04	Feb.03	A2 due	
		Feb.05		
Wk06	T05	Feb.10		Chapter 4: Network layer - data plane
		Feb.12	A3 due	
Wk07	T06	Feb.24		Chapter 5: Network layer - control plane
		Feb.26	A4 posted	MIDTERM
Wk08	T07	Mar.03		Chapter 5: Network layer - control plane
		Mar.05		
Wk09	T08	Mar.10	A4 due	Chapter 6: Link layer and LANs
		Mar.12	A5 posted	
Wk10	T09	Mar.17		
		Mar.19		Chapter 7: Wireless and mobile networks
Wk11	T10	Mar.24	A5 due	
		Mar.26		Chapter 8: Security
Wk12		Mar.31		
		Apr.02		Final exam review
Wk13	T11	Apr.07	A6 due	Office hours

4. Textbook(s) and Learning Material(s)

Required: Students are not required to purchase textbooks or other learning materials for this course.

Recommended (not required to purchase): James F. Kurose and Keith W. Ross, *Computer Networking: A Top-Down Approach*, 8th edition, Pearson, 2022. Accompanying resources can be found here. [eBook: ≈$58]

5. Assessment Scheme

5.1. Students will be assessed in this course according to the following measures:

Component	Weight	Due dates
Assignments (6)	18%	Jan. 22, Feb. 3, Feb. 12, Mar. 10, Mar. 24, Apr. 6
Tutorials (best 8 of 11)	8%	weekly
Midterm	24%	Feb. 26 (in class)
Final exam	50%	TBA

5.2. Each assignment is worth 3%. All assignments are mandatory, and none will be waived, for any reason.

6. Assessment Notes

6.1. *Assignments:*

    6.1.1. There will be six (6) assignments in this course. Assignment requirements will be posted in Brightspace.

    6.1.2. All assignments are **mandatory**. No assignment will be waived, for any reason.

    6.1.3. There will be no extra credit available in this course.

6.2. *Collaboration:*

    6.2.1. All assignments, tutorials, and all course work must be completed **individually**. Collaborating on any course work is strictly disallowed and will be reported as an academic integrity offence.

    6.2.2. All assignment work submitted for credit must be *original*, and the student submitting the work must be its sole and original author.

    6.2.3. The use of any generative artificial intelligence (AI) tool, including but not limited to ChatGPT, Copilot, etc., is **strictly prohibited** and will be reported as an academic integrity offence.

6.3. *Submission:*

    6.3.1. Only assignment files uploaded into Brightspace will be graded for credit. Students are responsible for the integrity of their submissions. Submissions that contain incorrect, corrupt, or missing files may receive a grade of zero, in accordance with the marking scheme. Corrections to submissions will not be accepted after the submission link expires.

    6.3.2. Technical problems do not exempt students from any submission requirement. If students wait until the last minute and then have issues with their computer or internet connection, their submission will still earn a grade of zero.

6.4. *Grading:*

    6.4.1. Assignment marks will be released to students when **all** the grading is completed.

    6.4.2. It is the student's responsibility to ensure that their midterm, tutorial, and assignment marks posted in Brightspace are correct. All marking disputes must be addressed with the individual responsible for marking the work (TA or instructor), **within one week** of the marks being posted. In cases where a student and a TA cannot agree, the matter will be referred to the instructor for resolution. For course work that is due close to the end of the term, the dispute period may be shortened to allow for the timely submission of final grades.

    6.4.3. The **only** valid reason to appeal a grade is an error by a TA in applying the grading scheme. Student errors, including but not restricted to submitting a wrong or corrupted file, are **not** a basis for appealing a grade. All appeals of this nature will automatically be denied.

6.5. *Tutorials:*

6.5.1. Tutorials begin the week of Jan. 12. The complete schedule is posted in Brightspace.

6.5.2. There will be 11 tutorials. Of those 11, the best eight (8) will count towards the final grade. No additional tutorials will be waived, for any reason.

6.5.3. Students who are absent for the beginning of the term, or who register late in the course, must use the flexibility provision stated in paragraph 6.5.2 to waive any missed tutorial(s).

6.5.4. Tutorials will *not* be posted in advance, for any reason.

6.5.5. Students must attend the tutorial session *for which they are registered*. We are unable to accommodate requests to attend alternate sessions.

6.5.6. Tutorial grades are for attendance and working on the tutorial problems for the entire session. Tutorial grading is at the discretion of the TAs and is not negotiable.

6.5.7. Tutorial work that is started or completed before your session will earn zero marks.

7. Late and Missed Work Policies

7.1. **Late penalty**: Late assignments will incur a deduction of 5% of denominator marks for every hour late, or part of an hour late, up to a maximum of 10 hours past the submission deadline. Once this 10-hour time window has elapsed, the Brightspace submission link will expire, and no submissions, substitutions, or corrections will be accepted, for any reason.

7.2. **Extension**:

7.2.1. Students may request a 72-hour deadline extension for a maximum of one (1) assignment during the entire term.

7.2.2. Extension requests must be submitted **before** the original due date for the assignment, using the online form provided in Brightspace. Emailed requests will *not* be accepted.

7.2.3. *No additional extensions will be granted*, for any reason, including in cases of short-term absence or incapacitation, as stated in paragraph 7.3.

7.2.4. Extension requests received after the assignment deadline will automatically be denied.

7.2.5. Once granted, an extension **cannot** be cancelled or deferred, *even if a student does not use the granted extension*.

7.3. **Short-term absence:** Short-term student absence or incapacitation will be accommodated through *the existing flexibility provisions stated in this course outline* in paragraphs 6.5.2, 7.1 and 7.2.

7.4. **Long-term absence:** Students who experience absence or incapacitation for longer than an accumulated total of five (5) days during the entire term **cannot** be accommodated, as they will be unable to achieve learning outcomes of the course.

8. Course Material

8.1. All concepts covered during the lectures and during the tutorials are part of the course material, including the course notes and related details discussed during lectures, all in-class examples, tutorial exercises, and in-class and forum discussions. **Students are expected to attend lectures and take their own notes**, to learn to demonstrate the course concepts at the level at which they will be assessed.

8.2. All materials created by the instructor for this course (including, but not limited to, assignment specifications, marking schemes, midterms, exams, and midterm and exam solutions), except where otherwise noted, remain *the intellectual property of the instructor*. They are intended for the personal and non-transferable use of students registered in the course. Reproducing, reposting, and/or redistributing any course materials, in part or in whole, without the written consent of the instructor, is a violation of IP rights, and is **strictly prohibited**.

9. Collaboration Policy

9.1. Collaborating on any course work, including but not restricted to assignments, midterms, and final exams, is **strictly disallowed** and will be reported to the Dean of Science as an academic integrity offence. Penalties for such offences can be found on the ODS web page. Students must complete all course work by themself.

9.2. Examples of academic integrity offences include: emailing course work to other students; uploading course work to a web site other than Brightspace, at any time; copying course work or solutions from any sources, even cited ones; working with other students; getting help from anyone other than the course TAs or the instructor; submitting course work, or portion thereof, written by anyone or any entity (including an artificial intelligence tool) other than the student submitting the work.

9.3. If students are unsure of the expectations regarding academic integrity, they must ask the course instructor. Sharing assignment or examination specifications or posting them online (to sites like Chegg, CourseHero, OneClass, etc.) is **always** considered academic misconduct. Students are **never** permitted to post, share, or upload course materials without explicit permission from the instructor. Academic integrity offences are reported to the office of the Dean of Science. Information, process and penalties for such offences can be found on the ODS web page.

9.4. All assessed activities in this course are designed to be completed by an individual working alone. The use of any artificial intelligence (AI) tool is **strictly prohibited** and will be reported as academic misconduct. This includes, but is not limited to, ChatGPT, Copilot, etc.

9.5. Posting course work and/or its solutions online, including assignment work, tutorial work, midterm work, and final exam work, and distributing course work and/or solutions to other students **at any time** is strictly prohibited and will be reported to the Dean of Science as academic misconduct. This includes work publicly posted on source control sites like GitHub.

9.6. Posting course work after the conclusion of the course is also strongly discouraged, as it is of no benefit to anyone other than future students looking to cheat. Employers want to see evidence of candidates' creativity and initiative, neither of which is demonstrated in the course work. Coming up with your own creative and original project ideas, and completing these projects on your own time is the best recipe for impressing potential employers.

10. Communications Policy

10.1. Students are expected to check their email on a **daily** basis. Important course-related announcements will be posted in Brightspace and forwarded to students' cmail accounts.

10.2. Due to a high volume of emails, the instructor will respond to student emails within 2 to 3 university business days. This timeframe excludes weekends, statutory holidays, and periods of university closure. Emailed questions that request information already available in a discussion forum, or in an assignment specification, or in the course outline may take longer.

10.3. Students are expected to post all short, simple course-related and assignment-related questions in the corresponding discussion forum in Brightspace. Questions must be posted in the appropriate forum, using a professional tone, and in a solution-free manner. For questions that are more complex, students must see the instructor during office hours.

10.4. The instructor will endeavour to respond to discussion forum posts in Brightspace within 12 university business hours. Before posting, students are expected to check the forums to see if their question has already been asked, as duplicate questions may not be answered.

10.5. **TA office hours** are the first point of contact for students requiring help with completing their assignment or tutorial work. Please note that TAs are not experts in the course material or assignment requirements. For questions about course work requirements, please see the instructor during office hours or post the questions in the appropriate Brightspace forum.

10.6. **Instructor office hours** are the first point of contact for students requiring help with the course material, or with understanding assignment requirements, or for academic advising.

10.7. Student emails to the TAs and/or the instructor **must** indicate the course code and section in the subject line. Their tone and content must be *professional*, and not personal, in nature. Specifically, they must be written as to a colleague or co-worker, not as to a family member or friend.

10.8. Students are expected to behave and communicate in a **courteous** and **professional** manner at all times. Any communications, either in person, or online in forum posts and email, that do not follow the basic precepts of common courtesy and professionalism will not be answered, and in extreme cases will be reported to university authorities. Carleton University's expectations of student behaviour online can be found at this link.

11. SCS Laptop Requirement

Every student who has been enrolled in a 1000-level (i.e. first year) course offered by the School of Computer Science after the 2020/2021 school year is required to have a laptop. This includes COMP1001, COMP1005, and COMP1006. For more information, please visit this link and then review the requirements here.

12. Undergraduate Academic Advisors

The Undergraduate Advisors for the School of Computer Science are available in Room 5302 HP; or by email at scs.ug.advisor@cunet.carleton.ca. The undergraduate advisors can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisors will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and the Writing Tutorial Services.

13. SCS Computer Laboratory

Students taking a COMP course can access the SCS computer labs. The lab schedule and locations can be found at this link. All SCS computer lab and technical support information can be found at this link. Technical support staff may be contacted in-person or virtually (see this link for details).

14. Academic Accommodations and Regulations

Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes are outlined on the Academic Accommodations website.

Statement on ChatGPT/Generative AI usage: The use of AI tools is strictly prohibited in this course and will be considered academic misconduct. As our understanding of the uses of AI and its relationship to student work and academic integrity continue to evolve, students are required to discuss their use of AI in any circumstance not described here with the course instructor to ensure it supports the learning goals for the course.

Statement on academic integrity: Students are expected to uphold the values of academic integrity, which include fairness, honesty, trust, and responsibility. Examples of actions that that compromise these values include but are not limited to plagiarism, accessing unauthorized sites for assignments or tests, unauthorized collaboration on assignments or exams, and using artificial intelligence tools such as ChatGPT when your assessment instructions say it is not permitted. Misconduct in scholarly activity will not be tolerated and will result in consequences as outlined in Carleton University's Academic Integrity Policy. A list of standard sanctions in the Faculty of Science can be found here. Additional details about this process can be found on the Faculty of Science Academic Integrity website. Students are expected to familiarize themselves with and abide by Carleton University's Academic Integrity Policy.

Student rights and responsibilities: Students are expected to act responsibly and engage respectfully with other students and members of the Carleton and the broader community. The Rights and Responsibilities Policy details the expectations of non-academic behaviour of students. Those who participate with another student in the commission of an infraction of this Policy will also be held liable for their actions.

Student concerns: If you have any concerns regarding this course, your first point of contact is your instructor. Please email or visit during office hours, and we will do our best to address your concerns. If we cannot resolve the issue, the next point of contact is the School of Computer Science at studentconcerns@scs.carleton.ca. If the concern remains unresolved, the final point of contact is the Office of the Dean of Science at ODScience@carleton.ca. Please follow this order of contact. Note: You can also bring your concerns to Ombuds services.