

COMP3203
Computer Networking
Course Outline: Fall 2026

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Lectures:

TAs and Office Hours: TBA on Brightspace

Course Calendar 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.

Course Objectives

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.

Textbook/Equipment/Material

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

However, we **highly recommend**: 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]. This is the textbook that the course notes follow.

Grading Scheme

Grading Items	Details	%
Assignments	Five assignments, 4% each.	20
Quizzes	Six in-class quizzes, 5% each.	30
Final Exam		50

Course Schedule (Estimated)

Week	Topics/Activities	Readings and Tasks
1	001: Welcome + Admin 002: Introduction Part 1	Chapter 1
2	003: Introduction Part 2 004: Application Layer Part 1	Chapter 2 Quiz 1
3	005: Application Layer Part 2 006: Application Layer Part 3	Chapter 2 Assignment 1
4	007: Transport Layer Part 1 008: Transport Layer Part 2	Chapter 3 Quiz 2
5	009: Transport Layer Part 3 010: Transport Layer Part 4	Chapter 3 Assignment 2
6	011: Network Layer (Data Plane) Part 1 012: Network Layer (Data Plane) Part 2	Chapter 4 Quiz 3
7	013: Network Layer (Control Plane) Part 1 014: Network Layer (Control Plane) Part 2	Chapter 5 Assignment 3
8	015: Link Layer and LANs Part 1 016: Link Layer and LANs Part 2	Chapter 6 Quiz 4
9	017: Link Layer and LANs Part 3 018: Link Layer and LANs Part 4	Chapter 6 Assignment 4
10	019: Wireless and Mobile Networks Part 1 020: Wireless and Mobile Networks Part 2	Chapter 7 Quiz 5
11	021: Wireless and Mobile Networks Part 3 022: Security Part 1	Chapter 8 Assignment 5
12	023: Security Part 2 024: Final Exam Review	Chapter 8 Quiz 6

Course Policies

1. Assignments:
 - a. There are five (5) assignments in this course, details about each assignment can be found on Brightspace.
 - b. Assignments must be completed individually. Collaboration is not permitted.
 - c. Assignments must be submitted on Brightspace. Emailed submissions are not accepted.
 - d. The use of AI is not permitted on assignments **unless** explicitly stated in the assignment specification.

2. Quizzes:

- a. There are six (6) quizzes that occur during class time. These quizzes will be posted on Brightspace at a specific time.
- b. Quizzes must be completed individually during the allocated time slot.
- c. Quizzes will be 20 minutes in length and consist of 5-15 questions.
- d. The use of AI is not permitted for quizzes.

3. Grading:

- a. Assignment marks will be released to students when all the grading is completed. The aim is to return graded work within 10 business days.
- b. If you believe an error has been made in the grading of an assignment, please contact the individual responsible for marking it (TA or instructor) within one week of marks being posted.

4. Late and Missed Work Policies

- a. Late penalties:
 - i. < 24 hours → no penalty
 - ii. 24-48 hours → 20% penalty
 - iii. 48-72 hours → 50% penalty
 - iv. > 72 hours → not accepted
- b. No-Late Bonus: for any individual that submits all assignments on-time, a 2% bonus on the final grade will be given.

5. Collaboration Policy

- a. 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 themselves.
- b. 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. 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.
- c. 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.

- d. 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.
 - e. 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.
6. Communications Policy
- a. Students are expected to check their email on a daily basis. Important course-related announcements will be posted in Brightspace and forwarded to students' email accounts.
 - b. 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.
 - c. Students are expected to post all short, simple course-related and assignment-related questions in the corresponding discussion forum in Discord. 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.
 - d. 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.
 - e. 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.
 - f. 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.
 - g. 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.
 - h. 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.

7. SCS Laptop Requirement

- a. 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.

8. Undergraduate Academic Advisors

- a. 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.

9. SCS Computer Laboratory

- a. 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).

10. Academic Accommodations and Regulations

- a. 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 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.