



School of Computer Science

COMP-3670- Computer Networks IS 2019

1. Instructor Information

- **Name:** Mahreen Nasir
- **Office:** 5106 Lambton Tower (LT)
- **Office Hours:** Tuesday and Thursday 11:30 a.m. - 12:30 p.m. (and by appointment)
- **Office Phone Number:** 519-253-3000 x 3793
- **Email:** nasir11d@uwindsor.ca (24hr response time Monday - Friday)

2. Room Locations and Information

Lecture Room	Lecture Day/Time	Anticipated Class Size	Level	Delivery Format
Memorial Hall 109	Tuesday and Thursday (02:30 p.m.- 03:50 p.m.)	50-60	Undergraduate	In Class

3. Graduate Assistant (GA) Information

Name	Office	Office Hours (and by appointment)	Email
Samaneh Miri	CS Tutor Room (ER 3146)	TBA	miriros@uwindsor.ca
Mayank Semwal	CS Tutor Room (ER 3146)	TBA	semwal@uwindsor.ca

4. Course Description

This course is designed to provide a detailed introduction of Computer Networks to the students with a focus on network terminologies, architecture, protocols & standards. The course will also cover in-depth functions performed at each layer of the network architecture such as Application layer, Transport layer, Network layer and Data Link layer. Topics include: network architectures, transport, routing, and data link protocols, addressing, local area networks, flow and congestion control, and network security. Examples will be drawn primarily from the Internet (e.g. TCP, UDP, IP) protocol suite. In addition to that, students will be able to explore Wireshark Software (Network Packet analyzer) by completing assigned exercises.

Pre-requisite(s):

- COMP-2120. Object Oriented Programming Using Java
- COMP-2540. Data Structures and Algorithms
- COMP-2560. Systems Programming
- COMP-3300. Operating System Fundamentals (Recommended Co-requisite)

5. Resources

• **Text Book**

- Computer Networking: A Top-Down Approach (7th Edition). J. F. Kurose and K. W. Ross. Addison-Wesley, 2013.

This textbook will be regarded as a primary source of information for this course. Assigned readings will be given to students and all students are required to study the assigned textbook sections and chapters.

• **Learning Management System**

- Blackboard

6. Learning Outcomes

By the end of this course, successful students will be able to:

Number	Learning Outcome
1	Describe the layered architecture of computer networks and the operation of main protocols in the TCP/IP model
2	Analyze the packet traffic over protocols layers and between different nodes (stations and routers)
3	Interpret the flow and error control mechanism of various protocols
4	Evaluate various IP addressing classes, subnetting and forwarding strategies along with various network performance levels
5	Differentiate between routing algorithms
6	Analyze different encryption schemes

7. Course Schedule and Topics

Week	Date	Topic, activity, assignment, etc.	Textbook Chapter or Readings
1	May 6-10 , 2019	Review of course outline, Structure and Policies	Chapter 1
		Introduction: Computer Networks and the Internet, Service models (OSI, TCP/IP)	
2	May 13-17 , 2019	Application Layer	Chapter 2
3	May 20-24 , 2019	Transport Layer (Introduction) Assignment-1 Due	Chapter 3
4	May 27-31 , 2019	Transport Layer (Advanced)	Chapter 3
5	June 3-7 , 2019	Transport Layer (Advanced)	
		(Mid Term 1)	
6	June 10-14 , 2019	Network Layer: Addressing, IP, Subnets, Routers, ICMP	Chapter 4
7	June 17-21 , 2019	Reading Week (No Classes)	
8	June 24-28 , 2019	Network Layer: Routing, Distance Vector (RIP), Link State (OSPF) Assignment-2 Due	Chapter 5
9	July 1-5, 2019	Network Layer: Routing, Distance Vector (RIP), Link State (OSPF)	Chapter 5

		(Mid Term 2)	
10	July 8-12, 2019	Link Layer, Local Area Networks	Chapter 6
11	July 15-19, 2019	Link Layer, Local Area Networks Assignment-3 Due	Chapter 6
12	July 22-26, 2019	Network Security	Chapter 8
13	July 29- Aug 2, 2019	Network Security	Chapter 8
Final Written Exam			

8. Important dates:

1. May 7, 2019 Classes Start
2. May 17, 2019 Add/Drop Course deadline
3. June 15-23, 2019 Reading Week
4. July 16th, 2019 Volunteer Withdraw

For regular updates, visit <http://www.uwindsor.ca/registrar/events-listing?page=1>

9. Assessment Methods

The course grade will be assessed as follows:

Sr. No.	Method of Assessment		% of Final Grade	Due Dates*
1.	Three (3) Assignments	Assignment-1	5%	May 23, 2019
		Assignment-2	5%	June 27, 2019
		Assignment-3	5%	July 18, 2019
2.	Written Exam	Mid-Term 1	20%	June 6, 2019
		Mid-Term 2	20%	July 4, 2019
		Final Exam	30%	TBA
3.	Project		15%	July 30, 2019

10. University Marking Scale

The following is the Senate-approved marking scale that will be used to determine your final grade in the class. You will receive a final grade expressed as a percentage, not as a letter grade.

- http://www.uwindsor.ca/secretariat/sites/uwindsor.ca.secretariat/files/grading_and_averages_amended_april_13_2018.pdf

A+	90 – 100%	A	85 – 89.9%	A-	80 – 84.9%
B+	77 – 79.9%	B	73 – 76.9%	B-	70 – 72.9%
C+	67 – 69.9%	C	63 – 66.9%	C-	60 – 62.9%
D+	57 – 59.9%	D	53 – 56.9%	D-	50 – 52.9%
F	0 – 49.9%				

11. Missed Assessment Procedures

- Assignments must be submitted electronically using Blackboard
- Late submission (max. upto 3 days) will result in a penalty of (-1) per day
- Request for makeup written test (midterms and final) will only be accepted for a valid medical reason (provided with approved Medical certificate) or if some emergency beyond control happened. In case of a Doctor's note, the student must submit a **Student Medical Certificate** signed by a Medical Doctor and the note must specifically state that the student was incapable of writing the exam on the day of the test.

4. If a student is sick, s/he must inform the instructor about his/her illness within 7 days, and with a supporting doctor's note which clearly states s/he is not able to attend the exam/test/assignment.
5. It is expected that students observe academic integrity and honesty while submitting their assignments.
6. Group discussions are encouraged, however assignment submissions should be individual.
7. Students are strongly encouraged to ask clarifying questions during the lectures or Instructor/GA/TA office hours or by email.

12. Bylaw/Policy Statements and Information

1. Student Evaluations of Teaching (SET) forms will be completed within the last two weeks of term.
2. Exams in this course are protected by copyright. Reproduction or dissemination of exams or the contents or format of exams in any manner whatsoever (e.g., sharing content with other students), without the express permission of the instructor, is strictly prohibited. Students who violate this rule or engage in any other form of academic misconduct will be subject to disciplinary action under Senate Bylaw 31: Academic Integrity.
3. Please read Senate Bylaw 31 on Academic Integrity procedures at the following link:
http://www.uwindsor.ca/secretariat/sites/uwindsor.ca.secretariat/files/bylaw_31_-_academic_integrity_amended_170526.pdf

Bylaw 31 defines the various types of academic misconduct that exist (e.g., plagiarism, cheating), lists and describes the stages of the process that will be followed in the event that academic misconduct is suspected or identified, and includes definitions and examples of sanctions that will be applied to first-time and subsequent offences. The rights of students and the roles that the instructors and Department Head of Kinesiology play within this process are also outlined in this bylaw. If instructors plan to use software (e.g., SafeAssign, Turnitin) to prevent plagiarism and provide students with feedback on their writing, they must indicate this in their syllabi.

4. Please read Senate Bylaw 51 on academic evaluation procedures at the following link:
http://www.uwindsor.ca/secretariat/sites/uwindsor.ca.secretariat/files/bylaw_51_-_academic_evaluation_procedures_amended_170526.pdf
5. Please read the Senate Policy on the Conduct of Exams and Tests at the following link:
http://www.uwindsor.ca/secretariat/sites/uwindsor.ca.secretariat/files/conduct_of_exams_and_tests_amended_sa161111.pdf

13. Expectations and Responsibilities (Code of Conduct and/or Classroom Behaviors)

1. Students are encouraged to discuss their course concerns with the instructor.
2. Students are expected to attend all lectures.

3. Students should benefit from the available office hours of instructor, Course GA/TA. In case a conflict arises, student may request the instructor to arrange for separate timings with the GA/TA or online assistance.
4. Cheating will be a misconduct and will be reported.
5. Copying each other's assignment will lead to "zero" for both assignments.

14. Student Accessibility Services

Student Accessibility Services (SAS) provides a variety of services and supports to students with documented disabilities (including: learning disabilities, attention deficit/hyperactivity disorder, acquired brain injuries, vision, hearing and mobility impairments, chronic medical conditions, and psychiatric issues).

If you have, or think you may have a disability, you may wish to visit SAS to learn how best to meet your academic goals. Students with disabilities who require academic accommodations in this course must contact an Advisor in SAS (lower level of Dillon Hall, (519) 253-3000 ext. 6172 or online at <http://www.uwindsor.ca/studentaccessibility/>) 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 me as early in the term as possible.

15. Academic Accommodations for Students with Disabilities

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

<http://www.uwindsor.ca/secretariat/48/senate-policies> and <http://www.uwindsor.ca/disability/>

16. Mental Health

University students face obstacles from time to time that can affect academic performance. If you face difficulties and need help, it is important to reach out to someone. Discuss your situation with your instructor or an academic advisor. For help addressing mental or physical health concerns, contact: Health Services at 519-973-7002, Student Counselling Centre at 519-253-3000, ext. 4616; Peer Support Centre at ext. 4551; or visit: <http://www.uwindsor.ca/studentcounselling/299/resources>. Another source for help is Good2Talk, a 24/7 helpline for Ontario college and university students (not affiliated with University of Windsor): 1-866-925-5454.

17. Student Support

University of provides various opportunities to students and support in several ways including academic support, career development, experiential learning, health and wellness, social and cultural support. Students are encouraged to visit the below link for more details.

<http://www.uwindsor.ca/156/lots-student-support-services>

18. SET

Student Evaluation of Teaching forms will be administered in the last two weeks of classes, in accordance with Senate policy.

<http://www.uwindsor.ca/secretariat/48/senate-policies#S 1.2.4/>and Senate