

CISC 4615 Data Communication and Network Fall 2018

Description: This course provides an introduction to fundamental concepts in the design and implementation of computer communication networks, their protocols, and applications. Topics to be covered include: the overview of network architectures, applications, network programming interfaces (e.g., sockets), transport, congestion, routing, and data link protocols, addressing, local area networks, wireless networks, network security, and network management. Examples will be drawn primarily from the Internet (e.g., TCP, UDP, and IP) protocol suite.

Instructor: Dr. Ying Mao (JMH 328A)

Email: yingmao at cis.fordham.edu

Office Hours: Tuesday / Friday 1:00 p.m. – 2:15 p.m. (other times by appointment).

Textbook: Computer Networks: A Systems Approach (5th edition), by Larry Peterson and Bruce Davie. Using the 4th edition is completely alright, though the chapter/section and the corresponding content may be different. While the class has a textbook, we will not follow its order of presentation; instead, we will use the textbook as a reference when covering each individual topic.

Course Web Resources: <https://yingmao.github.io/cisc4615/>

Grading Policy:

❖ Attendance	---- 5%
❖ Quiz / Homework	---- 20%
❖ Programming Assignments (4+1)	---- 25%
❖ Midterm	---- 20%
❖ Final	---- 30%

- A (≥ 90)
- B (≥ 80)
- C (≥ 70)
- D (≥ 60)
- F (< 60)

Policy: Attendance is strongly encouraged and required.

Late submission of labs/homework: 0% of earned points.

Tentative Course Schedule

Week 1-2	Introduction and Overview of Computer Networks
Week 3-4	Sockets Programming
Week 5-6	Network Architecture / Link Layer / Network Layer
Week- 7-8	Transport Layer
Week- 9	Midterm Review / Midterm
Week 10-11	Application Layer
Week 12	Network Case Studies
Week 13	Thanksgiving!
Week 14	Advanced Topics in Network
Week 15	Final

Additional Remarks

- **Academic Honesty**

All work produced in this course should be your own unless it is specifically stated that you may work with others. You may discuss the homework problems with other students generally, but may not provide complete solutions to one another; copying of homework solutions is always unacceptable and will be considered a violation of Fordham's academic integrity policy.

Violations of this policy will be handled in accordance with university policy which can include automatic failure of the assignment and/or failure of the course. For more information, please refer to the [Academic Integrity](#) website.

- **Makeup Exam**

There will be no make-up exams given after the exam date. If you know in advance that you will have to miss an exam, you must check with me (in advance) to avoid getting a zero for that exam. In case of illness on an exam date, please contact me as soon as possible, so that appropriate arrangement can be made.