Instructor:
Professor C. Huang
Room 4486ME
Tel: 520-2600 ext. 5730
Email: huang@sce.carleton.ca
http://www.sce.carleton.ca/faculty/huang.html

Prerequisites:
Undergraduate preparation in probability theory equivalent to STAT 3502. Precludes additional credit for EACJ 5607 (ELG 5374) or SYSC 4602 (ELG 4181).

Course Objectives:


References:


TCP/IP Illustrated, Vol. 1, W. R. Stevens, Addison-Wesley, 1994


http://www.ietf.org

Marking Scheme:

Attendance 10%
4 Assignments 20%
Final Exam 70%

Deadline Policy:

A minimum of one week, but normally ten days, will be allowed for completion of all assignments. Late assignments will not be accepted. All assignments shall be submitted online.

Class Schedule:
Carleton University  
Department of Systems and Computer Engineering  
SYSC 5201 Computer Communications  
Fall 2017  
Course Outline

6:05pm-7:25pm, Tuesday and Thursday, ME3328.

Checking Marks:
Lists of term marks will be posted on dates to be announced. It is each student’s responsibility to check that marks are correct or report any errors by the specified deadline.

Final Exam:  *Is for the evaluation purposes only and will not be returned to the student.*

Plagiarism:
Plagiarism (copying and handing in for credit someone else's work) is a serious instructional offense that will not be tolerated. Please refer to the section on instructional offenses in the Undergraduate Calendar for additional information.

Review Week:
Accreditation of our Engineering programs requires that classes and laboratories, tutorials, or problem analysis sessions continue to run through the review period of the fall term. For 2017, the last day of normally scheduled classes falls on December 8, 2017.

Course Schedule:

0) Course arrangements, scope etc.  
Computer networks and the Internet

1) Packet vs. circuit switching. Delay. OSI model and TCP/IP architecture.

2) Application layer. Web and HTTP.

3) DNS and Peer-to-Peer. Issue Ass.1

4) Transport Layer. RDT.

5) TCP and congestion control. Ass. 1 due. Issue Ass. 2.

6) Network layer. Queuing theory.

7) IP protocol and SDN. Ass. 2 due. Issue Ass 3.

8) Control plane. Routing algorithms.

9) Routing protocols. SDN control plane.

10) Link layer and error detection. Ass. 3 due. Issue Ass. 4.

11) Multiple access links and protocols.

12) ARP, VLAN, MPLS. Ass. 4 due.