COURSE CALENDAR DESCRIPTION

This course introduces the basics of communications and networking. Topics include transmission media; fundamental limits; protocols and hierarchies; the OSI model; encoding of data as signals; error and flow control; medium access; routing; internetworking; transport services; high-level applications. Prerequisites: General prerequisite; LE/EECS 2030 3.00 or LE/EECS 1030 3.00; SC/MATH 1310 3.00. Course credit exclusions: LE/CSE 3213 3.00, AK/AS/SC/CSE 3213 3.00. (NOTE: The General Prerequisite is a cumulative GPA of 4.50 or better over all major EECS courses. EECS courses with the second digit “5” are not major courses.)

INSTRUCTOR(S)

<table>
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<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
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<tbody>
<tr>
<td>Eckford, Andrew W.</td>
<td>Sec. E / LECT / F</td>
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TOPICS AND CONCEPTS

This course is an introduction to communications and networking. Topics covered include:

- Distinction between information and data, between signal and data, between symbol and data, and between analogue and digital data
- Transmission media; time domain and frequency domain
- Fundamental limits due to Shannon and Nyquist
- Protocol hierarchies; the OSI model
- Encoding of analogue/digital data as analogue/digital signals
- Data link protocols; error and flow control
- Medium access; Ethernet and token passing systems in LANs
- Routing of packets in networks, congestion control
- Internetworking

GRADED ASSESSMENT

Evaluation (this may change during the first two weeks of the course)

- 2 Quizes (2.5% each) 5%
- 2 Assignments (2.5% each) 5%
- 2 Midterms (20% each) 40%
- Final Exam: 50%
ADDITIONAL INFORMATION

Textbooks

Recommended Reading Material

ACADEMIC INTEGRITY LINKS
- Senate Policy on Academic Honesty - http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/
- Academic Integrity - http://lassonde.yorku.ca/academic-integrity

STUDENT LINKS
- Student Rights and Responsibilities - http://oscr.students.uit.yorku.ca/student-conduct
- Religious Observance - https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs
- Counselling and Disability Services - http://cds.info.yorku.ca/

Many courses utilize Moodle, York University's course website system. If your course is using Moodle, click here to access it.

Moodle @ York University