

**Department of Electrical and Computer Engineering
Concordia University
Course Outline
Higher Layer Telecommunication Protocols (ELEC 6861)
Fall 2007**

• **Course Instructor**

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• **Course Objectives**

Understand higher layers protocols, their characteristics, and their design principles.

Topics:

1. Review of computer networks and architectures
2. Quality of Service issues and protocols
3. End-to-End communications
4. Transport Layer (OSI Transport and TCP)
5. Session layer
6. Presentation layer and ASN.1
7. Application layer and the different applications/protocols
8. Security issues and solutions
9. Performance issues

• **Prerequisites**

ELEC 6851 (Introduction to Telecommunication Networks)
A very good programming knowledge (in Java, C++ or C) is also assumed.

• **Textbook**

The following book is recommended:
"Multimedia Communications: Applications, Networks, Protocols and Standards", by
Fred Halsall, Addison-Wesley, 2001.

• **Evaluation Scheme**

There will be 2 quizzes and a project. The contribution of each course component to the final grade is:

Quiz #1: 30% [scheduled for **Oct. 20, 2007**]

Quiz #2: 35% [scheduled for **Nov. 29, 2007**]

Project: 35% [Demos will be scheduled for **week #13**]

- Quizzes are closed book.

- The project is to be done in groups of **2 students**. Each group will have to submit only one report, but the contributions of every member have to be stated clearly in the report and **checked during the demos**.

- Your grade for the course will be based on your total mark.

- You must pass each component in order to pass the course.