CPSC 344-3/COMM 353-3 (Winter 2016)
(Business) Data Communications and Networking

Instructor:	Garth Frizzell	**Telephone:**	250-960-5103
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Office Hours:	Weds 5:00 – 6:00pm or by appointment		

Required Text: Business Data Communications and Networking (12th ed.)
By J. Fitzgerald and A. Dennis

Topics Covered: Introduction to Data Communications. OSI model, Internet model. Application Layer, Physical Layer, Data Link Layer, Network and Transport Layers. Data transmission and encoding, multiplexing, circuit switching, packet switching, protocols, data communication hardware. Wired and wireless Local Area Networks (LANs), Backbone Networks (BNs), Wide Area Networks (WANs). The Internet. Network design, management, and security.

Grading:

Midterm Exam:	20% (Feb 22, 2016)
Final Exam :	40% (as per UNBC schedule)
Research & Presentation:	20%
Critiques of Presentations:	10%
Debate :	10%

In an unlikely event that requires re-visiting the above grading scheme, your grade will be calculated using both schemes and you will be assigned the higher of the two grades.

General:
- For Academic Policies, please refer to the UNBC Calendar.
- Late assignments will be assessed 10% penalty for each day that the assignment is late. No assignments accepted after graded assignments have been returned.
- Discussion of assignment problems is encouraged but all assignments must be done independently, unless otherwise specified on the assignment sheet. Copied assignments will be treated as described under 'Academic offenses' and 'Academic sanctions' in the UNBC calendar.
- No makeup exams will be given.
- If there are students in this course who, because of a disability, may have a need for special academic accommodations, please come and discuss this with me, or contact Access Resource Center located in the Teaching and Learning Centre, Room 10-1048.

2. Research Topic/Presentation

This component is expected to be completed in groups of 3 students. Topics must be approved by Mr. Frizzell. Potential topics include:

- Cloud-based Networks
- Deep Space communications
- Sensor Networks
- Mobile/Adhoc Networks
- Broadband Networks
- Internet of "Things"

Provide a 1-2 page summary to Mr. Frizzell for approval **on or before Jan 25**. The summary should include a brief introduction to the topic, a rationale for why you chose the topic and your proposed methodology of research. Note that if more than one group chooses the same topic, it will be assigned on a *first-come-first-served* basis.

Deliverables:

1. A Final Report (not exceeding 4,000 words, excluding Executive Summary and Bibliography) with at least the following sections:
   - Executive Summary (max 300 words)
   - Introduction to the topic and relevance
   - Important issues and approaches
   - Current state/efforts (research/applied)
   - Future direction
   - An itemized statement on division of work among group members. (Note: simply stating that work was equally shared is not sufficient)
   - Bibliography

   The Final Report should be printed and delivered to Mr. Frizzell **by noon, April 4, 2016**.

2. A one-page (approx 400 words each) summary/critique of two selected presentations (excluding your own), demonstrating an understanding of the topic as presented. This is to be submitted individually and not as a group. **Due printed and delivered to Mr. Frizzell by noon, Apr 11, 2016**.

   Students who do not attend a presentation cannot submit the summary/critique of the missed presentation.

Presentations:

The presentations will take place on Mar 21/Apr 04. A detailed schedule will be posted on Blackboard.

- The presentation shall be approx 15 minutes long followed by a brief question/answer period and discussion. The presentation time should be shared by all group members. Presentations not adhering to the suggested time limits will be at a disadvantage.

- PowerPoint (.ppt) files for all groups are due by noon, April 4, 2016. The ppt files should

be e-mailed to garth.frizzell@unbc.ca

- Late submission of any component will incur a penalty of 10% per day it is late.

3. Debate: Cyberspace Governance: Regulate or Not?
Debate: Mar 15, 2016
Submission of Report (electronic): Mar 22, 2016
Group Size: 50/50

A new charter was recently proposed by UN's International Telecommunications Union (ITU) in the context of cyberspace governance. This could change the way we access the Internet. The WCIT Treaty, however, ended in Dubai on Dec 15, 2012 with a walkout of US and 55 other nations. Nearly 90 other nations signed the treaty.

The class will be divided in two groups. Both groups are required to research and gather as much information as possible on this charter. One group is expected to support the charter and the other to oppose it. A debate will be held on the date noted above. After the debate, each student will summarize the key points and submit a written report in the form of an Executive Summary, not exceeding 1000 words. The report must demonstrate understanding of various viewpoints and students' own take on the topic of the debate as stated above. Please note that if you do not participate in the debate but submit a report, your maximum score will not exceed 50% of the maximum score.

Note: This is not a group submission and must be completed individually.