**WEBER STATE UNIVERSITY**

**NTM 3710 – Switching and Transmission Network Systems Management**

**COURSE SYLLABUS - FALL SEMESTER 2015**

**LOCATION:** WSU Davis Campus Room 311

**INSTRUCTOR:** Darin Myers – darinmyers@weber.edu

**PHONE**: Office: 801-220-4042 Cell: 801-597-9264

**Date/Time:** Thursdays - 5:30pm

**Website:** [**http://faculty.weber.edu/dmyers/**](http://faculty.weber.edu/dmyers/) **(download lecture notes from this site)**

**Text:** **THE ESSENTIAL GUIDE TO TELECOMMUNICATIONS**

 **Fifth Edition**, By Annabel Z. Dodd

**Learning Outcomes:**

* + - * Students will demonstrate knowledge of the concepts, components, and architecture of public carrier and private IP networks and switching systems, optical and electrical transport networks, regulatory environments, and workings of basic TDM and IP transmission systems.
			* Students will demonstrate knowledge of cellular/mobile/fixed wireless technologies including network elements, routing, packet delivery, handoff technology, and the evolution of generations of wireless technologies and systems.
			* Students will understand management concepts involved in maintaining and operating a switching/transport network.
			* Students will understand future directions of switching systems and telecommunications networks.

**WEEK DATE SUBJECT ASSIGNMENT**

 1 Aug 28 Class Overview/Chp 3 – Industry Overview Read

 \*2 Sep 4 Chp 1 Lecture – Enabling Technologies Chp. 3 Quiz

 \*3 Sep 11 Trunking Lecture Chp. 1 Quiz

4 Sep 18 Chp 4 Lecture – Carrier Networks Read

 \*5 Sep 25 Chp 4 continued (transport lab) Chp. 4 Quiz

 6 Oct 2 Chp 2 Lecture – Ethernet/IP/VoIP Read

 \*7 Oct 9 Switching/Routing – Cisco 3 Tiers Chp. 2 Quiz

 8 Oct 16 XO Comm. Site Tour None

 9 Oct 23 Chp. 5 Lecture None

\*10 Oct 30 Chp. 6 Lecture Chp. 5 Quiz

\*11 Nov 6 Chp. 7 Lecture/SIP Lecture Chp. 6 Quiz

\*12 Nov 13 Advanced Networks Chp. 7 Quiz

13 Nov 20 Network Management None

14 Nov 27 No Class – Thanksgiving None

\*15 Dec 4 Review for Final Written Exam None

16 Dec 11 Final Written Exam None

**\*Quizzes:** Will be given throughout the semester and will be based on the previous week's lecture, readings, and assignments.

**In-Class Activities**: Class attentance is critical; therefore, students will participate in in-class activities. Students will only receive credit if present.

**Assignments:** Students will be given assignments throughout the course of the semester. These assignments will be explained in class.

**Research Paper:** Students will complete a research paper on emerging technologies in the area of switching and transport networks. Use APA style for the paper and include a minimum of 10 references. Use good design and appropriate grammar and punctuation. Topics must be approved by the instructor and include the following:

1. History of that technology
2. Current uses of that technology – give specific examples
3. Future trends

**Final Examination:** The final examination will be as scheduled for the class.

**Grading Scale:** 95% - 100% = A 90% - 94% = A- 87% - 89% = B+

 83% - 86% = B 80% - 82% = B- 77% - 79% = C+

 73% - 76% = C 70% - 72% = C- 67% - 69% = D+

 63% - 66% = D 60% - 62% = D-

**Grading:** Quizzes = 35%

 In-Class Activities = 10%

 Assignments = 10%

 Switching/Transport Emerging Technogies Research Paper = 15%

 Final Exam = 30%

**ADA:** Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Services Center. SSD can also arrange to provide course materials (including the syllabus) in alternative formats if necessary.

**Academic Honesty:** Any attempt to gain unfair advantage during exams, or submitting another student’s work as your own, is considered cheating.  If caught cheating in this class, you will fail the class and the university will pursue the matter.

**Campus Closure:** In the event of the campus being closed, please check the Canvas portal for course instruction.