SYLLABUS
Advanced Network Technologies and Design
TDC 560
Fall Quarter 2014/15

Instructor: Greg Brewster
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Course Site: https://d2l.depaul.edu
Required Text: MPLS Fundamentals, Luc de Ghein, Cisco Press, 2007.

This course introduces advanced network technologies and design, including Multi-Protocol Label Switching (MPLS) and IPv6 technologies. MPLS Virtual Private Networks, traffic engineering, VPLS, IPv6 routing, 6PE, 6VPE, QOS and Troubleshooting will all be discussed.

Required coursework components and their contribution to the final grade will be:

a) 4 homework assignments (35%)
b) 5 lab exercises (30%)
c) Midterm exam (15%)
d) Final exam (20%)

Lab exercises will require configuration of Cisco routers for OSPF and BGP routing, IPv4 over MPLS, MPLS VPNs, Ethernet over MPLS, and IPv6 over MPLS (6PE). Labs will use DLPod facilities which allow students to reserve lab time ahead of time in 2-hour chunks. It is recommended that students start work on labs early to ensure that they have sufficient time to complete them.

Further details on each assignment will be distributed in class. Assignments received late will be penalized as follows: up to 1 day late is 15% penalty; 1 - 2 days late is 25% penalty, 2 – 7 days late is 40% penalty; more than 1 week late results in no credit for the particular assignment. Although students may discuss general course principles, all assignments must be completed individually and duplicate work will receive no credit for either party. The strongest of sanctions will be imposed on anyone who submits as his/her own any work which has been prepared by someone else. I expect all students to read and understand DePaul's policy on Academic Integrity

Grade scale will be: A = 90%-100%, A- = 88%-90%, B+ = 86%-88%, B = 80%-86%, B- = 78%-80%, C+ = 76%-78%, C = 70%-76%, C- = 68%-70%, D+ = 66%-68%, D = 60%-66%, F = 0-60%. Grade scale may be changed to the students' advantage.

Class Schedule
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Date	Topics	Text Readings	Assignments
Sep. 16	IPv4 Routing, BGP and CEF	Chapter 6	*Lab #1 out*
Sep. 23	MPLS Label Switching and LDP	Chapters 1, 2, 3, 4	*HW #1 out* *Lab #2 out*
Sep. 30	MPLS VPNs	Chapter 7	*Lab #1 due 9/30* *HW #1 due 10/2*
Oct. 7	More VPNs and MPLS-TE	Chapters 9	*HW #2 out* *Lab #3 out* *Lab #2 due 10/9*
Oct. 14	Layer 2 Services: VPLS and AToM	Chapters 10, 11	*HW #2 due 10/14 by 5:30 pm*
Oct. 21	Midterm Exam		*Lab #4 out*
Oct. 28	IPv6 Addressing and Routing	Chapter 8	*HW #3 out* *Lab #3 due 10/30*
Nov. 4	Tunneling IPv6 over MPLS (6PE, 6VPE)		*Lab #5 out* *HW #3 due 11/6*
Nov. 11	MPLS and ATM architectures, QOS, Troubleshooting	Chapter 5, 12, 13	*HW #4 out* *Lab #4 due 11/13*
Nov. 18	Wrap up		*HW #4 due 11/18 by 5:30 pm* *Lab #5 due 11/22*
Nov. 25	Final Exam		

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and

course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in CampusConnect.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at http://academicintegrity.depaul.edu/. If you have any questions be sure to consult with your professor.

Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at: cdm.depaul.edu/enrollment.

Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.
To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at: csd@depaul.edu.

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