

SYLLABUS

Telecommunications Practicum

NET 511

Fall Quarter 2023/24

Instructor: Greg Brewster
Class Sessions: Tuesdays at 5:45 pm (on Zoom)
Office Hours: Tuesdays 4:00 - 5:30 pm or by appointment
E-mail: gbrewste@depaul.edu
Course Site: <https://d2l.depaul.edu>
Prerequisite: NET 463

Introduction to the design and management of data networks for the enterprise environment. Network design topics include physical design, logical design, LAN, WAN, and experimental design. Network management topics include switch and router configuration, including SNMP monitoring, performance measurement, and network trouble shooting. Students will have many hands-on lab exercises to strengthen their learning of network concepts.

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

- a) 2 homework assignments (20%)
- b) 4 lab exercises (50%)
- c) Physical Design Project (Project A) (15%)
- d) Logical Design Project (Project B) (15%)

Further details on each assignment will be distributed in class. Assignments received late will be penalized as follows: up to 1 day late is 5% penalty; 1 - 2 days late is 10% penalty, 2 – 3 days late is 15% penalty; 3 – 7 days is 20% penalty. For Labs and Projects, submission more than 1 week late results in a 30% penalty. For Homeworks, submission more than 1 week late results in a grade of 20%. Although students may discuss general course principles, all assignments must be completed individually and duplicate work will receive no credit for either party. I expect all students to read and understand DePaul's policies on Academic Integrity and Plagiarism (see below).

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- = 65%-70%, D = 60%-65%, F = 0-60%. Grade scale may be changed to the students' advantage.

Class Schedule

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<i>Class</i>	<i>Topics</i>	<i>Assignments</i>
Sep. 12	Course Introduction, BGP path selection	<i>Lab #1 out</i>
Sep. 19	Performance Testing, Physical Design	<i>Lab #2 out</i>
Sep. 26	Enterprise Redundancy in Layer 2 (RSTP) and Layer 3 (VRRP)	<i>Project A out</i> <i>Lab #1 due 9/27</i>
Oct. 3	WAN Technologies	<i>Lab #3 out</i> <i>Lab #2 due 10/4</i>
Oct. 10	Network Management	<i>HW #1 out</i>
Oct. 17	Logical Design, Network Operating Systems (Cisco IOS vs. Juniper Junos)	<i>Project B out</i> <i>Lab #3 due 10/18</i>
Oct. 24	Junos Configuration	<i>Lab #4 out</i> <i>HW #1 due 10/25</i>
Oct. 31	Virtual Private Network (VPN) Technologies	<i>HW #2 out</i> <i>Proj. A due 11/1</i>
Nov. 7	Software Defined Networks (SDNs)	<i>HW #2 due 11/8</i>
Nov. 14	Wrap Up	<i>Lab #4 due 11/15</i>
Nov. 21	Project B Due	

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.

Respect for Diversity and Inclusion at DePaul University as aligned with our Vincentian Values

At DePaul, our mission calls us to explore “what must be done” in order to respect the inherent dignity and identity of each human person. We value diversity because it is part of our history, our traditions and our future. We see diversity as an asset and a strength that adds to the richness of classroom learning. In my course, I strive to include diverse authors, perspectives and teaching pedagogies. I also encourage open dialogue and spaces for students to express their unique identities and perspectives. I am open to having difficult conversations and I will strive to create an inclusive classroom that values all perspectives. If at any time, the classroom experience does not live up to this expectation, please feel free to contact me via email or during office hours.

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. Please see <https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx> for additional information.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity. More information can be found at <https://resources.depaul.edu/teaching-commons/teaching/academic-integrity/Pages/default.aspx>.

Posting work on online sites, such as Course Hero

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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: <http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

Incomplete Grades

An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at <http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>

Preferred Name & Gender Pronouns

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate

name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at <http://policies.depaul.edu/policy/policy.aspx?pid=332>

Students with Disabilities

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:

- Loop Campus (312) 362-8002
- Lincoln Park Campus (773) 325-1677
- Email: csd@depaul.edu

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gregory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible.

Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.