

SYLLABUS

NET 365

Network Interconnection Technologies

Fall 2021

Instructor: Dale Buchholz
E-mail dbuchhol@depaul.edu
Class Meeting: Thursday: 5:45-9:00 pm in Lewis 1509
Office Hours: Thursday 4:00-5:30 pm in CDM 1617 (or by phone or Zoom)
Office Phone: (312) 362-6819

Course website: <http://d2l.depaul.edu>

Prerequisite: NET 363

E-Text: Cisco Networking Academy, Scaling Networks (SN) and Connecting Networks (CN): <https://www.netacad.com>

Optional Text: *CCNA Routing and Switching Complete Study Guide*
by Todd Lammle, Sybex, 2016, ISBN 978-1119288282

A comprehensive study of network interconnection technologies emphasizing layer 3 routing. TCP/IP protocols will be studied, including IPv4 and IPv6 address management, router operations and management. Static routing and dynamic routing will be covered. RIP, EIGRP, OSPF and BGP routing protocols will be studied and configured.

This course is asynchronous online. Thursday class will be recorded using COL (Course Online) technology. Recordings will be available a few hours after the class. Online students are expected to watch each class session. Students attending classes may also use the recorded material for review.

Material for homeworks, labs and exams will be based on class sessions and outside readings.

Students should check on D2L regularly for course updates and new content.

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

- a) 3 Homework Assignments (50 points each)
- b) 5 Lab Exercises (50 points each),
- c) Midterm Exam (100 points)
- d) Final Exam (100 points)

All work will be take-home, i.e., there are **NO timed in-class quizzes or exams**. You will have a minimum of one week (7 days) to do each assignment.

Further details on each assignment will be distributed in class and as part of the assignment. Final grades will be calculated by taking points earned and dividing by possible points to yield a total course percentage score. Final letter grades will then be assigned as:

A = 93% - 100% A- = 90% - 92%
 B+ = 87%-89% B = 83% - 86% B- = 80% - 82%
 C+ = 77% - 79% C = 73% - 76% C- = 70% - 72%
 D = 60% - 69% F = below 60%

Homework assignments, labs and exams must be completed individually.

Assignments are due by 11:59 pm on the date indicated. Any assignment received late will be penalized as follows: up to 1 day late is 10%; between 1 day and 2 days late is 15%; between 2 days and 3 days late is 20%; between 3 days and 7 days late is 25%; more than 1 week late is 30%. A waiver of any penalty may be granted for personal or medial reasons but **MUST** be approved by the instructor. Communicate your need for an extension as soon as possible.

Class Schedule

September 8, 2021

<i>Week</i>	<i>Topics</i>	<i>NetAcad Readings</i>	<i>Assignments</i>
Sept 9	Review: IP Subnets, Routing. RIP protocol	SN Ch. 5	HW 1 out Lab 1 out
Sept 16	Single-Area OSPF	SN Ch. 8.1, 8.2	HW 1 due 9/19 Lab 2 out
Sept 23	Multi-Area OSPF and Redistribution	SN Ch. 9, 10	HW 2 out Lab 3 out Lab 1 due 9/26
Sept 30	EIGRP	SN Ch. 6, 7	HW 2 due 10/3 Lab 4 out
Oct 7	IPv6 Routing (OSPFv3) and DHCPv6	SN Ch. 8.3	Lab 2 due 10/10 Mid-Term out
Oct 14	Mid-Term Review		Mid-term due 10/17
Oct 21	Border Gateway Protocol (BGP)	CN Ch. 3.5	HW 3 out Lab 5 out Lab 3 due 10/24
Oct 28	Network Address Translation (NAT)		HW 3 due 10/31
Nov 4	Access Control Lists (ACLs)	CN Ch. 4	Lab 4 due 11/7
Nov 11	Monitoring Networks: SNMP and SPAN	CN Ch. 5.2, 5.3	Lab 5 due 11/14 Final out
Nov 18	Final Review		Final due Nov 21

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 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/policyasp?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.