

# SYLLABUS

## NET 463

### Computer Networks

### Winter 2024

- Instructor:** Dale Buchholz  
**E-mail** [dbuchhol@depaul.edu](mailto:dbuchhol@depaul.edu)  
**Class Meeting:** Tuesday 5:45 – 9:00 pm -- Lewis 1511  
**Office Phone:** (312) 362-6819  
**Office Hours:** Tuesday 4:00-5:30 PM in CDM 617 (walk-in, phone or Zoom)  
**Course website:** <http://d2l.depaul.edu>  
**Prerequisite:** NET 413  
**E-Text:** Cisco Networking Academy, Switching, Routing and Wireless Essentials (SRWE) and Enterprise Networking, Security and Automation (ENSA): <https://netacad.com>  
**Optional Text:** CCNP and CCIE Enterprise Core ENCOR 350-401 Exam Cram, by Donald Bacha, April 2022.

This class is 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 in-class and asynchronous online. Tuesday classes will be recorded using COL (Course Online) technology. Recordings will be available shortly 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 homework, labs and exams will be based on class sessions and outside readings. Students should check on D2L regularly for course updates and new content.

#### **Assignments and Grade Percentages**

- a) 3 Homework Assignments (50 points each; 150 points total)
- b) 5 Lab Exercises (50 points each; 250 points total)
- c) Mid-Term and Final Exams (100 points each; 200 points total)
- d) Total available is 600 points

All assignments are take-home, i.e., there are **NO timed in-class quizzes or exams**. Typically, assignments are posted 7-10 days before the due date. You will have ample time to do each assignment.

Any assignment submitted late (after the due date) will be penalized 10% per day late up to 1 week late. No points for assignments submitted after 1 week. It is possible to get the penalty waived if you have a good reason. You must notify me via email before the due date to negotiate a waiver and a new due date.

Homework assignments, labs and exams must be completed individually. Further details on each assignment will be distributed in class and as part of the assignment.

Final grades will be calculated as follows: in each category, all points earned will be divided by possible points and then multiplied by the contribution percentages shown above to yield a total Course Score between 0% and 100%. Letter grades will then be assigned as:

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

There are 3 online content sources for Readings in this course:

- SRWE = Switching, Routing and Wireless Essentials course on <https://netacad.com>
- ENSA = Enterprise Networking, Security and Automation course on <https://netacad.com>
- CCEC = CCNP and CCIE Enterprise Core ENCOR 350-401 Exam Cram, Donald Bacha, April 2022. This e-book is available free through DePaul Library.

### Weekly Topics, Readings, and Assignments

<i>Date</i>	<i>Topics</i>	<i>Readings</i>	<i>HWs and Labs</i>
Jan. 9	Packet Forwarding, IP Subnets, Static Routes	SRWE 14, 15, 16	HW0 due Jan. 14
Jan. 16	Distance-Vector Routing: RIP and EIGRP	CCEC 2.1, 2.2	HW1 due Jan. 21
Jan. 23	Link-State Routing: OSPF	CCEC 2.3 ENSA 1, 2	Lab1 due Jan. 28
Jan. 30	Multi-Area OSPF and Route Summarization		Lab 2 due Feb. 4
Feb. 6	IPv6 Routing (OSPFv3) and DHCPv6	<b>Mid-Term out Feb. 8</b>	HW 2 due Feb. 11
Feb. 13	Border Gateway Protocol (BGP) and Redistribution	CCEC 3	<b>Mid-Term due Feb. 18</b>
Feb. 20	Network Address Translation (NAT)	CCEC 4.2 ENSA 6	Lab 3 due Feb. 25
Feb. 27	Access Control Lists (ACLs)	CCEC 7.1 ENSA 4, 5	HW 3 due Mar. 3
Mar. 5	Monitoring Networks: SNMP and SPAN	CCEC 30	Lab 4 due Mar. 10
Mar. 12	Advanced Routing: VRFs and SD-WANs	CCEC 22, 27.1 ENSA 13	Lab 5 due Mar. 17
Mar. 19	Final Exam (no class)	<b>Final out Mar. 10</b>	<b>Final due Mar. 19</b>

### 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***

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.

## **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](mailto: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.