

# SYLLABUS

## TDC 463

### Computer Networks and Data Systems

### Spring Session 2019

**Instructor:** Rami M. Salahieh  
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Classroom: Lewis 1507  
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**Office hours:** ½ hour before class, 1 hour after class (in class room)

#### Objectives of course:

- Strengthen your understanding of previous course content: underlying technologies, network stacks, IP forwarding, IP protocol, DHCP, NAT, ARP, ICMP
- Subnet design using IPv4 and IPv6 addresses
- Configure a DHCP server to allocate IP addresses
- Configure NAT in a router
- Understand router specification parameters
- Understand and implement routing protocols (OSPF, EIGRP, BGP) in router network
- Create standard and extended ACLs and apply them to routers

#### Course Management System:

[D2L](#) will be used in this course

#### Textbooks and resources:

- E-Text: Cisco Networking Academy, <https://www.netacad.com>
- Optional text: CCNA Routing and Switching Complete Study Guide, Todd Lammle, Sybex, 2016, ISBN 978-1119288282
- Network DLPODs and PODs hardware
- course notes: supplied for every lecture
- Cisco Packet Tracer Simulator (available upon request)

#### Prerequisites:

TDC 363

#### Grading:

Midterm Exam:	20%
Final Exam	20%
(6) Labs	40%
(2) HWs	20%
Class participation	refer to grading scale adjustments

- Late Lab assignments will be penalized 50% for late submission.
- Late Homework assignments will **not** be accepted (no credit will be received)
- Turn all assignments in using D2L.
- Exams are closed book, open notes (two pages, double sided ok) The final exam is **not** comprehensive.

#### Grading Scale:

A	93% - 100%
A-	90% - 92%
B+	86% - 89%

B	82% - 85%
B-	78% - 81%
C+	74% - 77%
C	70% - 73%
C-	66% - 69%
D	60% - 65%
F	less than 60%

### Grading Scale Adjustments:

- Depending on class averages, a **downward adjustment** in the grading scale *may* be implemented
- Class participation (LIVE Section)** may affect final course average from a range of +2% to -2%. The following percentage adjustments will be applied to the final grade based on demonstrated class participation/contribution.
  - +2%: highly meaningful participation/contribution, consistent attendance
  - +1%: solid participation/contribution, consistent attendance
  - 0%: occasional clarifying questions, consistent attendance
  - 1%: passive, non-relevant questions, one class missed
  - 2%: passive, non-relevant questions, several classes missed
- Class contribution (DL Section)** may affect final course average from a range of +2% to -2%. The following percentage adjustments will be applied to the final grade based on demonstrated class contribution using the course collaboration site
  - +2%: highly meaningful contributions/student assistance provided
  - +1%: solid contributions/student assistance provided
  - 0%: one contribution or student assistance provided
  - 1%: occasional clarifying questions
  - 2%: none recorded
- No extra credit** assignments will be provided in this class.

### Administrative Rules:

- DL students may attend live class instruction on any day
- No food/eating in classroom
- Turn off** all mobile devices!

### E-mail Correspondence Format:

- Due to the many e-mails that I receive on a daily basis, I asked you to format your e-mail subject heading as follows

e.g. TDC 463 (or TDC365): question from lecture day #1

- E-mail responses will be returned no later than two calendar days unless I have notified the class otherwise

### General Course Advice:

I view TDC 463/365 as a **challenging** course due to the breadth of material, the quantity of terms and definitions, and the inherent complexities of networking protocols. In order to succeed, each student must read the reference material, engage in class lectures/discussion, allocate enough time for HW/labs, and take advantage of my office hours

## Approximate Class Schedule

WK#	TOPICS	LAB/HW DUE Date	Chapters
Week 1 Mon 4/1	The internet and IP traffic growth Protocol stack and layers Layer 2/3/4 addressing Review: L2 Switching and Ethernet, ARP		Ch. 1, 2, 3
Week 2 Mon 4/8	IPv4 addresses and subnets Address aggregation NAT, DHCP		Ch. 5
Week 3 Mon 4/15	IPv6 addresses and subnets	Lab1/HW1	Ch. 4, 6
Week 4 Mon 4/22	IP protocol (v4, v6) ICMP		Ch. 7.1-7.4 Ch 8.1-8.2, 9.1-9.3, 18.1-18.2
Week 5 Mon 4/29	IP packet forwarding, router tables Static and default routing Routers types and router architecture	Lab2/HW2	CH. 11.1-11.4
Week 6 Mon 5/6	Homework answer review <b>Midterm Exam</b>	Midterm Exam	Ch. 11.1-11.4
Week 7 Mon 5/13	Distance vector routing, RIP, EIGRP		Ch. 11.5-11.6
Week 8 Mon 5/20	Link State Routing: OSPF HSRP	Lab3/Lab4	Ch. 11.7-11.8 Ch. 13
Week 9 Mon 5/27	<b>Memorial Day</b> - University officially closed		Ch 14, 15 Ch 26, 27
Week 10 Mon 6/3	Introduction to ACLs Path vector routing: BGP, redistribution	Lab5/Lab6	
Week 11 Mon 6/10	Homework answer review <b>Final Exam</b> (2nd half of class)		

### **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.

### **Online Course Evaluations**

Instructor and course evaluations provide valuable feedback that can improve teaching and learning. The greater the level of participation, the more useful the results. As students, you are in the unique position to view the instructor over time. Your comments about what works and what doesn't can help faculty build on the elements of the course that are strong and improve those that are weak. Isolated comments from students and instructors' peers may also be helpful, but evaluation results based on high response rates may be statistically reliable (believable). As you experience this course and material, think about how your learning is impacted. Your honest opinions about your experience in and commitment to the course and your learning may help improve some components of the course for the next group of students. Positive comments also show the department chairs and college deans the commitment of instructors to the university and teaching evaluation results are one component used in annual performance reviews (including salary raises and promotion/tenure). The evaluation of the instructor and course provides you an opportunity to make your voice heard on an important issue – the quality of teaching at DePaul. Don't miss this opportunity to provide feedback!

### **Academic Integrity and Plagiarism**

This course will be subject to the academic integrity policy passed by faculty. More information can be found at <http://academicintegrity.depaul.edu/>.

The university and school policy on plagiarism can be summarized as follows: Students in this course should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work any assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

### **Withdrawal**

Students who withdraw from the course do so by using the Campus Connection system (<http://campusconnect.depaul.edu>). Withdrawals processed via this system are effective the day on which they are made. Simply ceasing to attend, or notifying the instructor, or nonpayment of tuition, does not constitute an official withdrawal from class and will result in academic as well as financial penalty.

### **Retroactive Withdrawal**

This policy exists to assist students for whom extenuating circumstances prevented them from meeting the withdrawal deadline. During their college career students may be allowed one medical/personal administrative withdrawal and one college office administrative withdrawal, each for one or more courses in a single term. Repeated requests will not be considered. Submitting an appeal for retroactive withdrawal does not guarantee approval. College office appeals for CDM students must be submitted online via MyCDM.

### **Incomplete**

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.

CDM policy

requires the student to initiate the request for incomplete grade before the end of the term in which the course is taken. Prior to submitting the incomplete request, the student must discuss the circumstances with the instructor. Students may initiate the incomplete request process in MyCDM.

- All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval.
- If approved, students are required to complete all remaining course requirement independently in consultation with the instructor by the deadline indicated on the incomplete request form.
- By default, an incomplete grade will automatically change to a grade of F after two quarters have elapsed (excluding summer) unless another grade is recorded by the instructor.
- An incomplete grade does NOT grant the student permission to attend the same course in a future quarter.

### **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:

Student Center, LPC, Suite #370

Phone number: (773)325.1677

Fax: (773)325.3720

TTY: (773)325.7296

### **Student Attitude**

A professional and academic attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others when the instructor is speaking, mocking another's opinion, cell phones ringing, emailing, texting or using the internet whether on a phone or computer. If any issues arise a student may be asked to leave the classroom. The professor will work with the Dean of Students Office to navigate such student issues.

### **Civil Discourse**

DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be Socially Responsible Leaders. It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student. Any instances of disrespect or hostility can jeopardize a student's ability to be successful in the course. The professor will partner with the Dean of Students Office to assist in managing such issues.