

# NET 311 - Introduction to Computer and Telecom Systems

## Spring 20/21

**Instructor** Ahmad Abusini

**Office Hours** Online via Zoom meeting Saturday 6:00PM to 7:30PM CST

**Course Website** <http://d2l.depaul.edu>

**E-mail** aabusini@depaul.edu

**Meeting time** Mondays-Online

**Location** Online-No in class meetings

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### Text:

The below textbooks are the designated texts for this course however the Instructor will provide students with summarized power point slides for lectures and Quizzes' study so there is no need to purchase the book.

**Data communications and computer Networks**, 8<sup>th</sup> Edition by Curt White

ISBN-10 1-305-11663-1

**Systems Architecture**, Seventh Edition by Stephen D. Burd.

ISBN 978-1-305-08019-5

Published by Cengage.

### Description:

This course is an introduction to computer architecture and operating systems with an emphasis on network systems. Topics covered include computer components and functions, as well as computer networks, network security, distributed systems, and network administration. Students will have several hands-on labs utilizing a Linux and Cisco IOS environment and will use Shell script for basic systems and network administration as well.

### Goals:

- Design technology solution reports for problems presented in class
- Recognize design concepts of Operating Systems
- Evaluate solutions to technology problems to determine their effectiveness
- Identify the components and functions of computer networks
- Describe basic operating procedures of a data network
- Experiment with several Networking tools to gain troubleshooting skills
- Define Access Control and apply it on Cisco equipment
- Execute administrative and operational tasks in a Linux environment
- Operate a basic Local Area Network.

### Prerequisites:

None

### Course Breakdown:

- 10% - Quizzes (4 @ 2.5% each)
- 40% - Lab Assignments (4 @ 10% each)
- 15% - Online Class Participation (Online discussions and activities).
- 35% - Final Paper and Presentation

Find more details below.

**Quizzes:** there will be a total of 4 quizzes. The quiz is taken online on the D2L course website.

**Lab assignments:** there will be 4 assignments. We learn about Virtualization, Linux, Cisco IOS, and Firewalls.

**Class Participation:** Your online participation in class activities and discussions is essential to succeed in this course. Participating in the online discussion forums is also part of the Participation grade. Your instructor will be monitoring your engagement in D2L to determine your overall participation grade.

**Final Paper and Presentation:** each student will be assigned one topic. The student will write a paper to analyze the specified topic. Each student is required to develop power point presentations with student's voice presenting his/her work. The presentation is worth 10% of the total grade. The paper is worth 25% also for the last (final) week there will be online Final Paper's discussions for the students to discuss and share ideas about their topics and other project's related concerns. More details will be shared in week 1

Finally, note that **late submissions will be accepted with partial credit.**

### Grading Scale

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%	

### Course Schedule:

Date	Topic	Required Reading	Assignment
3/29	Introduction to Systems Architecture	Ch 1 and 2	
4/5	Data Representation and IP Addressing	Ch 3	Quiz 1 due 4/11
4/12	Operating Systems and Virtualization	Ch 11	Lab 1 due 4/18 at 11:59PM
4/19	Computer Networks	Ch 3	Quiz 2 due 4/25
4/26	Intro to Cisco Equipment and Packet Tracer	Ch 9	Lab 2 due 5/2 at 11:59PM
5/3	Data and Network communications - LANs	Ch 8 and 9	Quiz 3 due 5/9
5/10	Conducted and Wireless Media	Ch 8 and 9	Lab 3 due 5/16 at 11:59PM
5/17	Distributed Applications and Wide Area Networks (the Internet)	Ch 10, 12 and 13	Quiz 4 due 5/23

Date	Topic	Required Reading	Assignment
5/24	Network Security and Administration		Lab 4 due 5/30 at 11:59PM
5/31	Review, follow up and final paper discussions		Final paper due 3/15 at 11:59PM
6/7			Final paper due

**\* Note, that the chapters in the course schedule above might not accurately reflect the required readings as they were matched to the best from the two assigned text books so please follow the reading materials provided to you in D2L.**

### Course Policies:

#### 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

**All quizzes and assignments must be completed individually.** 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](http://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](mailto:csd@depaul.edu).

Lewis Center 1420, 25 East Jackson Blvd.

Phone number: (312)362-8002

Fax: (312)362-6544

TTY: (773)325.7296

#### 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>