

ENTERPRISE NETWORKING

Disclaimer Statement

The final examination in this course will be remotely proctored. Please be sure you have your computer's camera on so you can display your photo identification so the proctoring system can verify your identity. If you run into any issues please reach out to your Success Coach.

You can also prepare for your examination by reading this helpful guide: https://www.talview.com/en/test-taker-guide

ENTN400 — Enterprise Networking, 3.0 hours

PROFESSOR

Tom Tardy is an Information Security professional passionate about teaching and helping others perform at their best. Tom loves to learn and challenge himself. He has a master's degree in Information Security, two bachelors' degree – in Education and Computer Forensics – and an associate's degree in Law Enforcement Technology. He also is a Certified Ethical Hacker ($C \mid EH$) and Certified Hacker Forensic Investigator ($C \mid HFI$).

CONTACT INFORMATION

E-mail: ttardy@lakewood.edu Cell Phone: 800-517-0857 X 786

ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

All members of the Lakewood University community who use the University's computing, information or communication resources must act responsibly. Support is accessible by calling 1-800-517-0857 option 2 or by emailing info@lakewood.edu

BOOKS AND RESOURCES

West, Jill. CompTIA Network+ Guide to Networks. Available from: VitalSource Bookshelf, (9th Edition). Cengage Learning US, 2021.

EVALUATION METHOD

Graded work will receive a numeric score reflecting the quality of performance. Course Requirement Summary

- Assignments Total of 60 Points
- Weekly discussion forums-Total of 80 Points
- Final Exam 50 Points

GRADING SCALE

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Graded work will receive a numeric score reflecting the quality of performance as given above in evaluation methods. The maximum number of points a student may earn is 190. To determine the final grade, the student's earned points are divided by 190.

Your overall course grade will be determined according to the following scale:

 $\begin{array}{l} A = (90\% - 100\%) \\ B = (80\% - 89\%) \\ C = (70\% - 79\%) \\ D = (60\% - 69\%) \\ F < (Below 60\%) \end{array}$

ACADEMIC INTEGRITY/ PLAGIARISM:

Cheating (dishonestly taking the knowledge of another person whether on a test or an assignment and presenting it as your work) and plagiarism (to take and pass off as one's own the ideas or writing of another) are a serious issue. While it is legitimate to talk to others about your assignments and incorporate suggestions, do not let others "write" your assignments in the name of peer review or "borrow" sections or whole assignments written by others. We do get ideas from life experiences and what we read but be careful that you interpret these ideas and make them your own.

I am aware that many types of assignments are available on the internet and will check these sources when there is legitimate suspicion.

Penalty is a zero on the assignment. In cases where there is a major or continuous breach of trust, further discipline, such as an "F" in the course, may be necessary.

The major consequence of any form of cheating is damage to your character and the result of trust and respect.

DISABILITY ACCOMMODATIONS

Students who have a disability and wish to request an academic accommodation should contact Jim Gepperth, the Disabilities Services Coordinator and Academic Dean. The student can request an accommodation at any time although it is encouraged to do so early in the enrollment process. The student should complete an accommodation request form which begins a conversation between the school and the student regarding the nature of their disability and an accommodation that would help the student succeed in their program. The school may request documentation regarding the disability to address the accommodation request effectively. The school will communicate to the student the type of accommodation arranged. This process typically follows a team approach, bringing together persons from the academic department (including the instructor) and personnel from other departments as necessary. Additional information on disability accommodations may be found in the Lakewood University Catalog.

Disability Services Email: disabilityservices@lakewood.edu

SUPPLEMENTAL TEXTS

You can use the following resources to assist you with proper source citation.

American Psychological Association Style Guide- <u>https://www.mylakewoodu.com/pluginfile.php/118179/mod_resource/</u> content/1/APA%20Style%20Guide%207th%20edition.pdf

The Purdue OWL website is also a helpful resource for students. Here is a link to the OWL website: <u>https://owl.purdue.edu/</u><u>owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html</u>

LIBRARY

Mary O'Dell is the Librarian on staff at Lakewood University

She is available by appointment. You can make an appointment with her by emailing her at modell@lakewood.edu or call at 1-800-517-0857 X 730

You may also schedule a meeting at this link: https://my.setmore.com/calendar#monthly/r3a761583354923270/01032020

She can assist you with navigating LIRN, research, citations etc.

SUPPORT

Each student at Lakewood University is assigned a Success Coach. Your Success Coach exists to assist you with academic and supportive services as you navigate your program. They will reach out to you, often, to check-in. Please use the resources they offer.

Student Services is available to assist with technical questions regarding Lakewood University and all services available to you.

1-800-517-0857 option 2 info@lakewood.edu studentservices@lakewood.edu

CAREER SERVICES

Students are offered Career Services at any point as they journey their academics at Lakewood University.

1-800-517-0857 option 2 careerservices@lakewood.edu

LESSONS

| TITLE Lesson #1 | COURSE TOPIC | READINGS/ASSIGNMENTS | DUE Assignment 1 upon completion of the lesson | OBJECTIVES Objective 1 |
|--------------------|---|---|--|----------------------------------|
| | An Introduction to Networking How Computers Find Each Other on Networks | Study Course Syllabus Read Chapters 1 & 2 Participate in the Discussion Forum Complete Assignment 1 Lesson Evaluation | | |
| TITLE Lesson #2 | How Data Is Transported Over Networks Structured Cabling and Networking Elements | READINGS/ASSIGNMENTS Read Chapters 3 & 4 Participate in the Discussion Forum Lesson Evaluation | DUE | OBJECTIVES Objective 2 |
| TITLE Lesson #3 | COURSE TOPIC Network Cabling Wireless Networking | READINGS/ASSIGNMENTS Read Chapters 5 & 6 Participate in the Discussion Forum Lesson Evaluation | DUE | OBJECTIVES Objective 3 |
| TITLE Lesson #4 | Cloud Computing and Remote Access Network Risk Management Cryptography | READINGS/ASSIGNMENTS Read Chapters 7 & 8 Participate in the Discussion Forum Lesson Evaluation | DUE | OBJECTIVES Objective 4 |

| TITLE Lesson #5 | COURSE TOPIC • Unified Communications and Network Performance Management | READINGS/ASSIGNMENTS Read Chapter 9 Participate in the Discussion Forum Lesson Evaluation | DUE | OBJECTIVES Objective 5 |
|--------------------|--|--|---|----------------------------------|
| TITLE Lesson #6 | COURSE TOPIC • Network Segmentation and Virtualization | READINGS/ASSIGNMENTS Read Chapter 10 Participate in the Discussion Forum Complete Assignment 2 Lesson Evaluation | DUE Assignment 2 upon completion of the lesson | OBJECTIVES Objective 6 |
| TITLE Lesson #7 | COURSE TOPIC • Wide Area Networks | READINGS/ASSIGNMENTS Read Chapters 11 Participate in the Discussion Forum Lesson Evaluation | DUE | OBJECTIVES Objective 7 |
| TITLE Lesson #8 | COURSE TOPIC • Industrial and Enterprise Networking | READINGS/ASSIGNMENTS e Read Chapter 12 Participate in the Discussion Forum Complete Assignment 3 Complete the Final Exam Request the Next Course Lesson Evaluation THANKS FOR A GREAT CLASS | DUE Assignment 3 and the Final exam upon completion of the lesson | |

DESCRIPTION

Students will be able to describe the basic (design, implementation and management) concepts related to data communications and networking. Topics included but not limited to network topology, protocols, transmission media, switching techniques, access control and addressing for wired and wireless networks, network security and network management principles.

Program Objectives

- 1. Describe the difference between data communication & Telecommunication and be able to explain the networking.
- 2. Be able to identify the general purpose of physical layer and the data link layer.
- 3. Describe the purpose and the components of network layer as well as the key elements of transport layer services.
- 4. Identify key LAN design considerations and major network topologies.
- 5. Explain the need for verifying types of WAN connecting options and the switching technologies.
- 6. Identify the major types and functionalities of servers and understand importance of security in the enterprise.
- 7. Describe the wireless LAN media and how to configure a small wireless LAN.
- 8. Describe how convergence affects security, privacy and ethics and describe possible social networking business applications.

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8. Describe how convergence affects security, privacy and ethics and describe possible social networking business applications.