



NETWORKING FUNDAMENTALS

NETF200 — Networking Fundamentals, 3.0 hours

PROFESSOR

Maurice C. Barnes is a Senior Database Administrator with the Department of Defense (DOD), where he has devoted 80 percent of his time improving department business practices and daily operating procedures.

Maurice has been a primary asset to the United States government in implementing the conversion from Hewlett Packard (HP) and Dell legacy hardware systems to virtual and cloud base infrastructures in an effort to improve productivity and efficiency while reducing cost.

Maurice is a frequent volunteer at multiple non-profit organizations throughout Autauga and Montgomery Counties in an effort to mentor young teenagers and adults.

CONTACT INFORMATION

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Cell Phone: 800-517-0857 X 708

ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

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

BOOKS AND RESOURCES

Ciampa, Mark. CompTIA Security+ Guide to Network Security Fundamentals. Available from: VitalSource Bookshelf, (8th Edition). Cengage Learning US, 2024.

EVALUATION METHOD

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

Course Requirement Summary

- Assignments - Total of 80 Points
- Weekly Discussion Forums-Total of 80 Points
- Ascend Online Labs-770 Points
- Midterm - 25 Points
- Final Exam - 50 Points

GRADING SCALE

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 195. To determine the final grade, the student's earned points are divided by 195.

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

A = (90% - 100%)

B = (80% - 89%)

C = (70% - 79%)

F < (Below 70%)

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- https://www.mylakewoodu.com/pluginfile.php/118179/mod_resource/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: https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html

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	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #1	<ul style="list-style-type: none">Defend against attacks	<ul style="list-style-type: none">Study Course SyllabusRead Chapters 1 & 2Participate in the Discussion ForumComplete AssignmentComplete all assigned lab activitiesLesson Evaluation	Assignment upon completion of the lesson	Objective 1
Lesson #2	<ul style="list-style-type: none">Hash, symmetric, and asymmetric cryptographic algorithms	<ul style="list-style-type: none">Read Chapters 3 & 4Participate in the Discussion ForumComplete AssignmentComplete all assigned lab activitiesLesson Evaluation	Assignment upon completion of the lesson	Objective 2
Lesson #3	<ul style="list-style-type: none">Network technologies and security	<ul style="list-style-type: none">Read Chapters 5 & 6Participate in the Discussion ForumComplete Assignment	Assignment upon completion of the lesson	Objective 3

- Complete all assigned lab activities
- Lesson Evaluation

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #4	<ul style="list-style-type: none"> • Securing a Wireless Network 	<ul style="list-style-type: none"> • Read Chapters 7 & 8 • Participate in the Discussion Forum • Complete all assigned lab activities • Complete Midterm • Lesson Evaluation 	Assignment upon completion of the lesson	Objective 4

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #5	<ul style="list-style-type: none"> • Risks and Mobile Devices 	<ul style="list-style-type: none"> • Read Chapters 9 & 10 • Participate in the Discussion Forum • Complete Assignment • Complete all assigned lab activities • Lesson Evaluation 	Assignment upon completion of the lesson	Objective 5

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #6	<ul style="list-style-type: none"> • Access Control 	<ul style="list-style-type: none"> • Read Chapters 11 & 12 • Participate in the Discussion Forum • Complete Assignment • Complete all assigned lab activities • Lesson Evaluation 	Assignment upon completion of the lesson	Objective 6

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #7	<ul style="list-style-type: none"> • Vulnerability assessment 	<ul style="list-style-type: none"> • Read Chapters 13, 14, and 15 • Participate in the Discussion Forums (There are 2) • Complete Assignments (There are 2) • Complete all assigned lab activities • Lesson Evaluation 	Assignment upon completion of the lesson	Objective 7

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #8	<ul style="list-style-type: none"> • Final Exam 	<ul style="list-style-type: none"> • Complete all assigned lab activities • Complete the Final Exam • Request the Next Course • Lesson Evaluation • THANKS FOR A GREAT CLASS 	Final exam upon completion of the lesson	Objective 1 Objective 2 Objective 3 Objective 4 Objective 5 Objective 6 Objective 7

DESCRIPTION

This course will help students discover the fundamentals of networking technology. Topics included but not limited to data communications, telecommunications, infrastructure security, inter/internetworking, and the application of networking to multimedia, information storage, and distribution.

Program Objectives

1. Describe how to defend against attacks
2. Describe hash, symmetric, and asymmetric cryptographic algorithms
3. Explain how network technologies can enhance security
4. Explain the solutions for securing a wireless network
5. Explain the risks associated with mobile devices

6. Describe how to implement access control
7. Define vulnerability assessment and explain why it is important
8. Describe strategies for reducing risk

OBJECTIVES

1. Describe how to defend against attacks
2. Describe hash, symmetric, and asymmetric cryptographic algorithms
3. Explain how network technologies can enhance security
4. Explain the solutions for securing a wireless network
5. Explain the risks associated with mobile devices
6. Describe how to implement access control
7. Define vulnerability assessment and explain why it is important
8. Describe strategies for reducing risk