



ROUTING AND SWITCHING

RTSW400 — Routing & Switching, 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

E-mail: mbarnes@lakewood.edu

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

Routing & Switching Essentials 1st Edition

EVALUATION METHOD

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

Course Requirement Summary

- Assignments - Total of 40 Points
- Weekly discussion forums-Total of 80 Points
- Midterm quiz - 20 Points
- Final Exam - 50 Points

GRADING SCALE

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">Routing Concepts	Study Course Syllabus Read Chapters 1 & 2 Participate in the Discussion Forum Complete Assignment 1 Lesson Evaluation	Assignment 1 upon completion of the lesson	Objective 1
Lesson #2	<ul style="list-style-type: none">Static and Dynamic Routing	Read Chapters 3, 4, 5 Participate in 2 Discussion Forum Lesson Evaluation	Assignment 2 upon completion of the lesson	Objective 2
Lesson #3	<ul style="list-style-type: none">Switched Networks	Read Chapters 6 & 7 Participate in the Discussion Forum Complete Assignment 2 Lesson Evaluation	Assignment 3 upon completion of the lesson	Objective 3
Lesson #4	<ul style="list-style-type: none">Switch Configuration	Read Chapters 8-9 Midterm Lesson Evaluation		Objective 4
TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES

Lesson #5	<ul style="list-style-type: none"> VLANs and Access Control Lists 	Read Chapters 10 & 11 Participate in 2 Discussion Forums Complete Assignment 2 Lesson Evaluation	Objective 5
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TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #6	<ul style="list-style-type: none"> DHCP 	Read Chapters 12 & 13 Participate in the Discussion Forum Complete Assignment 3 Lesson Evaluation		Objective 6

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #7	<ul style="list-style-type: none"> NAT for IPv4 	Read Chapters 14 & 15 Participate in the Discussion Forum Complete Assignment 4 Lesson Evaluation		Objective 7

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #8	<ul style="list-style-type: none"> Device Discovery, Management and Maintenance 	Complete the Final Exam Request the Next Course Lesson Evaluation THANKS FOR A GREAT CLASS		Objective 8

DESCRIPTION

TBD

Program Objectives

- Understand the function of a router, its configuration and the routing table algorithm
- Understand the static routing concept and the dynamic routing and be able to understand how to configure each of them
- Understand the operation of switched network and the difference between a collision domain and a broadcast domain
- Identify the basic configuration of a cisco switch and how to set up a port security
- Learn the purpose of VLANs, Trunkport, Access-List in a switched network and how to configure each of themplans
- Define DHCP and explain the operation of DHCPv4 and DHCPv6
- Understand the purpose and function of NAT and the different types of NAT
- Identify the use of CDP and LLDP to map a network topology and how to upgrade an IOS system image

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