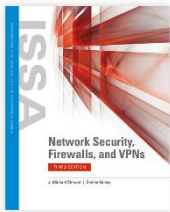## ITSY-2301-201HY-FA2022
Firewalls & Network Security
Fall 2022
Tuesday 6:00PM-8:20PM – STEAM 138

Instructor Information: Jeramey Litzman, jlitzman@com.edu, 409-933-8367

Student hours and location: 5:30-6:00PM Tuesday, Thursday (by appointment)

Required Textbook:

Navigate 2 eBook Access for Network Security, Firewalls, and VPNs with Cloud Labs
Third Edition
ISBN: 9781284184655

https://www.jblearning.com/catalog/productdetails/9781284184655

Course Description: Identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.

Course requirements: Student will need to utilize the most currently supported version of the Microsoft Office suite to include Office 2010 or later. Student will need to have access to the Internet with a minimum bandwidth speed of 1MB/768KB (standard DSL or faster).

Determination of Course Grade/Detailed Grading Formula:

	Points
Discussion Topics	200
Chapter Exams	450
Cloud Labs	200
Final Exam	150
Total	1000

Grading Scale:

A: Final Average of 895-1000
B: Final Average of 795-894
C: Final Average of 695-794
D: Final Average of 595-694
F: Final Average of 0-594

Late Work / Make-Up Policy: Late work will be accepted for one week after the due date with a points deduction of -20%. Assignments are then removed from Brightspace and a grade of 0 is assigned.

Attendance Policy: Students are expected to attend all lectures (online or on-ground) and labs (online or on-ground). Students not able to attend a session are required to notify the instructor no later than 2 hours prior to the start of the session. Students that miss more than 35% of the total session times will be considered for student referral and possibly being dropped from the course. Students will need to log into the Brightspace system at least 1 time per week.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
Demonstrate system security skills through firewall implementation and testing	Critical Thinking Skills	Chapter 5, 6, 7, 8 Exams
Use system tools, practices, and relevant technologies to implement a security plan	Critical Thinking Skills	Chapter 14 Exam
Evaluate practices, tools, and technologies to identify security breaches, sources of attacks, and protect mission critical systems	Critical Thinking Skills	Chapter 2 Exam
Establish an appropriate level of security based on an analysis of security logs	Critical Thinking Skills	Chapter 4 Exam
Use relevant tools to secure a network, respond to and follow up on various types of attacks.	Critical Thinking Skills	Chapter 14 Exam

Academic Dishonesty: Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an

extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact the Math Department Chair, Leslie Richardson, at lrichardson@com.edu or 409-933-8244.

Course Outline:

Week	Chapter – Topic
1	Chapter 1 – Fundamentals of Network Security
2	Chapter 2 – Network Security Threats
3	Chapter 3 – Common Network Topologies and Infrastructures
4	Chapter 4 – Network Design Considerations
5	Chapter 5 – Firewall Fundamentals
6	Chapter 6 – Firewall Implementation
7	Chapter 7 – Firewall Deployment Considerations
8	Chapter 8 – Configuring Firewalls
9	Chapter 9 – VPN Fundamentals
10	Chapter 10 – VPN Management
11	Chapter 11 – VPN Technologies
12	Chapter 12 – VPN Implementation
13	Chapter 13 – Firewall Security Management
14	Chapter 14 – Best Practices for Network Security Management
15	Chapter 15 – Emerging Technology and Regulatory Considerations
16	Final Exam

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook.<https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.* https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered

through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact Michelle Brezina at 409-933-8124 or mvaldes1@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is October 5. The last date to withdraw from the 16-week session is November 18. The last date to withdraw for the 2nd 8-week session is December 1.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:
If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here https://www.com.edu/community-resource-center/. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.