

Wayland Mission Statement

Wayland Baptist University exists to educate students in an academically challenging, learning-focused, and distinctively Christian environment for professional success, and service to God and humankind.

Contact Information

Course: MISM 4339 VC01 – Cybersecurity Defense Analysis

Campus: WBUonline

Term/Session: Fall 1 2026

Instructor: Dr. Lisa Lee Bryan

Office Phone Number/Cell #: 910-247-4410

WBU Email Address: bryanl@wbu.edu

Office Hours, Building, and Location: WBUonline

Class Meeting Time and Location: WBUonline

Catalog Description:

Addresses various techniques for detecting and responding to emerging computer security threats such as risk identification mitigation, social and physical security, and vulnerability management.

Prerequisite:

None

Textbook Information

Required Textbook(s) and/or Required Materials:

BOOK	AUTHOR	VER	YEAR	PUBLISHER	ISBN#
Cybersecurity Analyst+ (CySA+)	CompTIA	2	2024	CompTIA	9781-93508-0732

Chapters 1 – 5

*This course is part of the **Pioneer Academic Access Program**. You will have access to an eBook, access code, and interactive learning material on the first day of class through your Blackboard course site. You will be notified via email with access instructions and additional information. If the course requires a physical book you can order at bookstore.wbu.edu. You can choose to opt-out, however if you do you will lose access to **EVERY class/material** and have to source through third party vendors.*

Optional Materials: <<List optional materials recommended to enhance student learning>>

Course Outcome Competencies:

- Describe Incident response to ethical hacking attacks from various sources
- Penetration Testing, organizational security, and security controls
- Security Operations and in-depth monitoring
- Describe threat and vulnerabilities management technology
- Describe software and systems security as it relates to defending cyber attacks
- Describe industry compliance and assessments
- Discuss threat intelligence through penetration testing
- Describe threat hunting techniques
- Describe risk and physical security and countermeasures
- Risk identification, calculation, communication, and training

Attendance Requirements

WBUonline

Students are expected to participate in all required instructional activities in their courses. Online courses are no different in this regard; however, participation must be defined in a different manner. Student “attendance” in an online course is defined as active participation in the course as described in the course syllabus. Instructors in online courses are responsible for providing students with clear instructions for how they are required to participate in the course. Additionally, instructors are responsible for incorporating specific instructional activities within their course and will, at a minimum, have weekly mechanisms for documenting student participation. These mechanisms may include, but are not limited to, participating in a weekly discussion board, submitting/completing assignments in Blackboard, or communicating with the instructor. Students aware of necessary absences must inform the professor with as much advance notice as possible in order to make appropriate arrangements. Any student absent 25 percent or more of the online course, i.e., non-participatory during 2 or more weeks of an 8-week session, may receive an F for that course. Instructors may also file a Report of Unsatisfactory Progress for students with excessive non-participation. Any student who has not actively participated in an online class prior to the census date for any given session is considered a “no-show” and will be administratively withdrawn from the class without record. To be counted as actively participating, it is not sufficient to log in and view the course. The student must be submitting work as described in the course syllabus. Additional attendance and participation policies for each course, as defined by the instructor in the course syllabus, are considered a part of the university’s attendance policy.

University Policies

Academic Integrity:

[Link to Statement on Academic Integrity](#)

Artificial Intelligence: No use of any generative AI tools permitted.

- i. Students are required to create and produce all work themselves or with assigned group members. Any work submitted that has used an AI generative tool like ChatGPT will be in immediate violation of the academic integrity policies for the course and WBU.
- ii. All assignments must be fully created, designed, and prepared by the

- student(s).
- iii. Any work that uses generative AI will be treated as plagiarism.

Disability Statement: In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Disability Services Coordinator and Academic Coach serves as the coordinator of students with disabilities and must be contacted concerning accommodation requests. Office: (806) 291-1057. Documentation of a disability must accompany any request for accommodations.

Course Requirements and Grading Criteria

<<Grading based on weights

	Percentages	
A	90 – 100%	
B	80 - 89 %	
C	70 – 79%	
D	60 – 69%	
F	59% and below	

Labs 50%
 Discussion 25%
 Biblical Integration 5%
 Finals 20%

Student Grade Appeals: Students shall have protection through orderly procedures against prejudices or capricious academic evaluation. A student who believes that he or she has not been held to realistic academic standards, just evaluation procedures, or appropriate grading, may appeal the final grade given in the course by using the student grade appeal process described in the Academic Catalog. Appeals may not be made for advanced placement examinations or course bypass examinations. Appeals are limited to the final course grade, which may be upheld, raised, or lowered at any stage of the appeal process. Any recommendation to lower a course grade must be submitted through the Vice President of Academic Affairs to the Faculty Assembly Grade Appeals Committee for review and approval. The Faculty Assembly Grade Appeals Committee may instruct that the course grade be upheld, raised, or lowered to a more proper evaluation.

Tentative Schedule

Week	Defense Analysis	Chapter	Labs	Activities	Total Points
1	Introduction to CyberDefense	1,2	20		20
2	Vulnerability Response, Handling, and Management	2	118	87	205

	Biblical Integration Discussion				
3	Threat Intelligence and Threat Hunting	3	65		65
4	System and Network Architecture	4	44		44
5	Vulnerability Assessments	4	61		61
6	Reconnaissance	5	117		117
7	Vulnerability Management	5	51		51
Final	Final Exam Preparation TestOut Cyber Defense Pro Domain Review Multiple attempts can Be Repeated	1-5 Domain Review Review B.2.1/B.2.2	37		37
Totals			513	87	600

Additional Information

Complete Domains B2.1/B2.2 for your final exam. This is a repeatable test and your choice. The final certification exam is offered after completion of both MIS4339/4343 and 2 practice exams.