**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 2025

**Instructor**

**:** Dr. Joseph Marnell

**Office Phone Number/Cell #**

**:** 806.544.6336

**WBU Email Address**

**:** ,arnellj@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**

**<<**Select appropriate campus and delete the rest. Add your class attendance policy below the appropriate campus policy. >>

External Campuses

Students enrolled at one of the university’s external campuses should make every effort to attend all class meetings. All absences must be explained to the instructor, who will then determine whether the omitted work may be made up. When a student reaches that number of absences considered by the instructor to be excessive, the instructor will so advise the student and file an unsatisfactory progress report with the external campus executive director/dean. Any student who misses 25 percent or more of the regularly scheduled class meetings may receive a grade of F in the course. Additional attendance policies for each course, as defined by the instructor in the course syllabus, are considered a part of the university’s attendance policy. A student may petition the Academic Council for exceptions to the above stated policies by filing a written request for an appeal to the Vice President of Academic Affairs.

Plainview Campus

The university expects students to make class attendance a priority. Faculty members provide students a copy of attendance requirements. These are provided on the first day of class. Students in programs for which an outside agency (such as the Veteran’s Administration) has stricter attendance requirements will be subject to those requirements. In addition, the university registrar will provide each student affected a list of these regulations. The dean of the school must approve part-time and adjunct faculty class attendance requirements prior to syllabi distribution.

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](https://www.wbu.edu/academics/writing-center/Academic%20Integrity%20Statement%20Pol%208.4.1%20Attch%20Oct%2020222.pdf)

**Artificial Intelligence:** reference one of the following in regard to how generative artificial intelligence (GAI) such as ChatGPT may or may not be used in this course: Choose A, B or C and delete the others.

* 1. **No use of any generative AI tools permitted.**
		1. 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.
		2. All assignments must be fully created, designed, and prepared by the student(s).
		3. Any work that uses generative AI will be treated as plagiarism.
	2. **Generative AI tools permitted in specific context and with proper citations.**
		1. Students are allowed to use, reference, or incorporate generative AI tools into specific assignments for this course. When used, students must properly cite the generative AI tool in their submitted work.
		2. While there is no true substitute for direct help and instruction for your instructor, students may be allowed to use generative AI tools to provide further explanations of course content, readings, and other assignments. Any use of generative AI tools to help further explain or translate content must be properly referenced and cited.
		3. Specific parameters for generative AI usage are provided by the instructor.
		4. Any use of generative AI tools outside of the approved instructor parameters will be considered a form of plagiarism and academic dishonesty.
	3. **Generative AI tools usage encouraged and may be actively assigned in coursework.**
		1. Use of generative AI tools is actively encouraged and incorporated in to specific assignments for this course.
		2. Use of generative AI tools for assignments in brainstorming, content understanding, or revision to work is perfectly acceptable if cited and referenced properly in any submitted work for the course.
		3. Use of generative AI is encouraged as long as students understand the use of generative AI in the course is to be an assistance tool and not the generator of assignments and submitted work. Ultimately, all submitted work must still reflect student’s own work, understanding, and analysis.
		4. Specific parameters for generative AI usage provided by the instructor.
		5. Any use of generative AI tools outside of the approved instructor parameters will be considered a form of plagiarism and academic dishonesty.

**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 accumulation of points:

|  |  |  |
| --- | --- | --- |
| Total Points: | 475 |  |
| A | 475-427 |  |
| B | 426-380 |  |
| C | 376-332 |  |
| D | 331-285 |  |
| E | <284 |  |
| Attendance (1st-7th week)- 8th week is testing. | 2 points per week x 7 weeks. All absence is reportable. | Classes last until 9pm at night. |

The specific requirements of the course include the course FRA, labs, videos, fact sheets, attendance and the domain review finals.

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**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 | 0 | 4 | 4 |
| **2** | Vulnerability Response, Handling, and Management | 2 | 8 | 43 | 136 |
| **3** | Threat Intelligence and Threat Hunting | 6 | 6 | 31 | 83 |
| **4** | System and Network Architecture | 6 | 6 | 47 | 125 |
| **5** | Vulnerability Assessments | 17 | 17 | 71 | 126 |
| **Final** | Final Exam PreparationTestOut Cyber Defense Pro Domain ReviewMultiple attempts can Be Repeated  | 1-5Domain Review B.2.1/B.2.2 | 71 |  |  |
| **Totals** |  |  | 37 | 216 | 475 |

**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 MISM4339/4343 and 2 practice exams.