**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 4336-VC99– Information Systems Security Management

**Campus**

: << WBU Online >>

**Term/Session**

**:** << Fall 2 2022>>

**Instructor**

**:** <<Ex: Dr. Sammy J. Van Hoose>>

**Office Phone Number/Cell #**

**:** <<If Applicable>>

**WBU Email Address**

**:** <<vanhoose@wbu.edu>>

**Office Hours, Building, and Location**

**:** <<Online, Monday – Saturday, 9:00 A.M. – 9:00 P.M. >>

**Class Meeting Time and Location**

**:** <<As arranged>>

**Textbook Information**

**Required Textbook(s) and/or Required Materials**

**:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **BOOK** | **AUTHOR** | **ED** | **YEAR** | **PUBLISHER** | **ISBN#** |
| Routing & Switching Pro | TestOut | 7th | 2020 | TestOut | 9781-93508-0558 |

*The textbook for this course is part of the* ***Wayland’s Automatic eBook*** *program. You will have access to an eBook and interactive learning material on the first day of class through your Blackboard course site. The cost of this Automatic eBook will be billed directly to your student account when you register for the course. You will be notified via email with access instructions and additional information. If you do not wish to participate in the Automatic eBook program, you will have the first 12 days of class to opt-out of the program (additional details will be outlined in your email instructions). For more information on the Automatic eBook program, visit the Wayland Bookstore* [*Automatic eBook FAQ*](https://bookstore.wbu.edu/site_inclusive.asp) *page.*

**Optional Materials**

**:** <<None>>

**Course Information**

**Catalog Description**

**:**

Provides essential skills to manage the Information Security portfolio; covers key security concepts including Access Control, Cryptography, Information Security Governance, Operations Security and Business Continuity.

**Prerequisite:**

MISM 4306

**Course Outcome Competencies**

**:**

* Demonstrate an understanding of Telecommunications and Network Security
* Demonstrate an understanding of Information Security Governance and Risk Management
* Demonstrate an understanding of Software Development Security
* Demonstrate an understanding and working knowledge of Security Architecture and Design
* Demonstrate an understanding and working knowledge of Business Continuity and Disaster Recovery Planning

**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**

**Statement on Plagiarism and Academic Dishonesty**

**:** Wayland Baptist University observes a zero tolerance policy regarding academic dishonesty. Per university policy as described in the academic catalog, all cases of academic dishonesty will be reported and second offenses will result in suspension from the university.

**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 Director of Counseling, Career and Disability Services serves as the coordinator of students with disability and should be contacted concerning accommodation request at (806) 291-3765. Documentation of a disability must accompany any request for accommodations.

Accessibility issues with content in WBUonline courses or in Blackboard should be addressed to the WBU accessibility coordinator, Dr. Trish Ritschel-Trifilo, trifilot@wbu.edu or call (806) 291-3745.

**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.

**Course Requirements and Grading Criteria**

<<Fill in specific requirements of the course including the criteria utilized to assess student performance and the weight of each. A variety of means to evaluate student performance should be used and grading criteria should conform to the grading system in the catalog.>>

**The University has a standard grade scale:**

A = 90-100, B = 80-89, C = 70-79, D = 60-69, F= below 60, W = Withdrawal, WP = withdrew passing, WF = withdrew failing, I = incomplete. An incomplete may be given within the last two weeks of a long term, within the last week of an 8-week session, or within the last two days of a microterm to a student who is passing, but has not completed a term paper, examination, or other required work for reasons beyond the student’s control. A grade of “incomplete” is changed if the work required is completed prior to the last day of the next long 16-week term or 8-week session, unless the instructor designates an earlier date for completion.  If the work is not completed by the appropriate date, the I is converted to an F.

**Tentative Schedule**

| Week | **Topics** | **Notes** |
| --- | --- | --- |
| **1****Oct. 10 - 15** |

|  |
| --- |
| 01.01: Introduction |
| 02.01: TCP/IP Networking Model |
| 02.02: OSI Networking Model |
| 02.03: Networking Basics |
| 02.04: Data Encapsulation and Communications |
| 02.05: Ethernet |
| 02.06: Network Devices |
| 03.01: Cisco Device Connection |
| 03.02: Command Line Interface (CLI) |
| 03.03: IOS Licensing |
| 03.04: Device Settings |
| 03.05: Device Passwords |

 | Statement of Understanding due Oct. 12, 2022

|  |
| --- |
| 35 minutes |
| 49 minutes |
| 37 minutes |
| 29 minutes |
| 36 minutes |
| 47 minutes |
| 51 minutes |
| 40 minutes |
| 75 minutes |
| 25 minutes |
| 73 minutes |
| 71 minutes |

 |
| **2****Oct. 17 - 22** |

|  |
| --- |
| 03.06: Cisco Discovery Protocol (CDP) |
| 04.01: IPv4 Addressing Overview |
| 04.02: Subnets |
| 04.03: Subnet Planning and Design |
| 04.04: Route Summarization |
| 04.05: IPv6 Addressing Overview |
| 04.06: Dynamic Host Configuration Protocol (DHCP) |
| 04.07: The Domain Name System (DNS) |
| 05.01: Layer 2 Switching Overview |

 |

|  |
| --- |
| 79 minutes |
| 58 minutes |
| 59 minutes |
| 48 minutes |
| 30 minutes |
| 56 minutes |
| 68 minutes |
| 107 minutes  |
| 60 minutes |

 |
| **3****Oct 24 - 29** |

|  |
| --- |
| 05.02: Switch Interface Configuration |
| 06.01: IPv4 Routing |
| 06.02: Static Routing |
| 06.03: Dynamic Routing |
| 06.04: IPv4 Routing Troubleshooting |
| 06.05: Network Communications Troubleshooting |
| 07.01: Open Shortest Path First (OSPF) Overview |
| 07.02: OSPF for IPv4 |
| 07.03: OSPF Configuration |
| 07.04: OSPF LSA Types and Databases |
| 07.05: Adjacency Troubleshooting |
| 07.06: EIGRP for IPv4 Routing |
| 07.07: EIGRP for IPv4 Configuration |
| 08.01: IPv6 Routing Overview |
| 08.02: OSPFv3 |

 |

|  |
| --- |
| 98 minutes |
| 35 minutes |
| 40 minutes |
| 58 minutes |
| 43 minutes |
| 51 minutes |
| 37 minutes |
| 30 minutes |
| 70 minutes |
| 31 minutes |
| 51 minutes |
| 36 minutes |
| 52 minutes |
| 39 minutes |
| 27 minutes |

 |
| **4** **Oct. 31 – Nov. 5** |

|  |
| --- |
| 08.03: EIGRPv6 |
| 09.01: Wireless Concepts |
| 09.02: Wireless Standards |
| 09.03: Wireless Configuration |
| 09.04: Wireless Network Design |
| 09.05: Wireless Network Implementation |
| 09.06: SOHO Configuration |
| 09.07: Wireless Security |
| 09.08: Wireless Troubleshooting |
| 10.01: WAN Types |
| 10.02: Leased Line WAN Links |

 |

|  |
| --- |
| 28 minutes |
| 36 minutes |
| 42 minutes |
| 59 minutes |
| 70 minutes |
| 43 minutes |
| 66 minutes |
| 66 minutes |
| 77 minutes |
| 29 minutes |
| 61 minutes |

 |
| **5****Nov. 7 - 12** |

|  |
| --- |
| 10.03: Network Address Translation (NAT) |
| 10.04: WAN Troubleshooting |
| 11.01: Virtual LANs (VLANs) |
| 11.02: Trunking |
| 11.03: Spanning Tree |
| 11.04: Spanning Tree Configuration |
| 11.05: Router-on-a-Stick InterVLAN Routing |
| 11.06: Switch InterVLAN Routing |

 |

|  |  |
| --- | --- |
| 71 minutes |  |
| 64 minutes |  |
| 44 minutes |  |
| 82 minutes |  |
| 103 minutes |  |
| 104 minutes |  |
| 63 minutes |  |
| 80 minutes |  |

 |
| **6****Nov. 14 - 19** |

|  |
| --- |
| 11.07: Switch Troubleshooting |
| 12.01: Access Control Lists (ACLs) |
| 12.02: IPv6 and Extended ACLs |
| 13.01: Network Time Protocol (NTP) |
| 13.02: System Message Log |
| 13.03: Simple Network Management Protocol |
| 13.04: NetFlow |
| 13.05: Quality of Service (QoS) |
| 13.06: Enterprise Networking |
| 13.07: Cloud Resources |
| 13.08: Virtual Private Networks and Remote Switch Access |
| 13.09: Default Gateway Redundancy |
| 13.10: Network Automation |
| 14.01: Network Threats |

 |

|  |
| --- |
| 66 minutes |
| 103 minutes |
| 116 minutes |
| 20 minutes |
| 22 minutes |
| 33 minutes |
| 21 minutes |
| 24 minutes |
| 37 minutes |
| 27 minutes |
| 29 minutes |
| 44 minutes |
| 30 minutes |
| 46 minutes |

 |
| **Nov.21 - 26** | **Thanksgiving** |  |
| **7****Nov. 28 – Dec. 3** |

|  |
| --- |
| 14.02: Network Security Best Practices |
| 14.03: Switch Security |
| 14.04: Malware |
| 14.05: Combat Malware |
| 14.06: Sniffing |
| 14.07: Session Hijacking |
| 14.08: Denial of Service |
| 15.01: Cryptography |
| 15.02: Cryptanalysis and Cryptographic Attack Countermeasures |

 |

|  |
| --- |
| 58 minutes |
| 141 minutes |
| 54 minutes |
| 74 minutes |
| 74 minutes |
| 75 minutes |
| 77 minutes |
| 67 minutes |
| 26 minutes |

 |
| **8****Dec 5 - 10** | Practice Exams and Final (Certification) Exam |  |

**Additional Information**

<<Section can be deleted if not needed>>