

Syllabus

Foundations of Network Security and Information Assurance

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Course Objectives

The main goal of this course is to provide you with a fundamental understanding of network security principles and implementation. You will learn about the technologies used and principles involved in creating a secure computer networking environment.

This course will also act as a comprehensive guide for anyone wishing to take the CompTIA Security+ SY0-301 Certification Exam. It provides an introduction to the fundamentals of network security, including compliance and operational security; threats and vulnerabilities; application, data, and host security; access control and identity management; and cryptography. The course covers new topics in network security as well, including psychological approaches to social engineering attacks, Web application attacks, penetration testing, data loss prevention, cloud computing security, and application programming development security. Specific topic coverage includes:

- Introduction to Security
- Malware and Social Engineering Attacks
- Application and Network Attacks
- Vulnerability Assessment and Mitigating Attacks
- Host, Application, and Data Security
- Network Security
- Administering a Secure Network
- Wireless Network Security

- Access Control Fundamentals
- Authentication and Account Management
- Basic Cryptography
- Advanced Cryptography
- Business Continuity
- Risk Mitigation

To reinforce the concepts learned, you will complete a hands-on project. Students seeking graduate level credit will complete additional project assignments.

Disability Services

Reasonable accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class of any accommodations needed for the course. Late notification may cause the requested accommodations to be unavailable. All accommodations must be approved through the Office of Disability Services (ODS) in the Human Resources Building (HRB), Room 80, 217-206-6666.

Course Materials

Required textbook information is listed in the textbook section of Blackboard. Assignments, grade book, and other resources relevant to the course are posted on the UIS Blackboard site.

Contacting the Instructor

If you have any questions about the course or need assistance, please contact the instructor by email at any time. rose.janis@uis.edu

When sending an email, please put UIS CSC430 in the subject line. Be sure to include your section ('A' for on campus or 'B' for online). For example, UIS CSC430A or UIS CSC430B. This will assure that your email is filtered out to my attention, allowing me to give you a faster response!

If you do not follow the above instructions, you will receive a reply which begins as follows:

This email has not been properly processed through the recipient's filters because its subject line does not meet the criteria outlined in class instructions. Please refer to materials posted in Blackboard and resubmit this email.

If you receive the above message, you must re-send a corrected email, making certain to use an email subject line that follows the instructions given above.

NOTE: Students who ask questions that are answered in the files I have posted in Blackboard will receive a reply redirecting them to the files in Blackboard.

Keep Copies

To avoid any potential confusion later in the semester when memories may be less clear, please keep a copy of your assignments as well as any email correspondence with the instructor. This will ensure a clear path of communication as the course moves through the semester.

The Due Dates Sheet

As a rule of thumb, please refer to the Due Dates Sheet to determine the date an assignment is due.

Assignments are due by 11:59pm Central time on the due date.

Any exceptions to the above rule will be posted as a Blackboard Announcement. All announcements are automatically emailed out to students!

Important note: Late assignments and missed tests are not accepted and result in a zero.

Plagiarism

I cannot emphasize this enough. All work must be your own. Plagiarism, defined as copying or receiving materials from a source or sources and submitting this material as your own, is never permitted. Collaboration, evidenced by similarity, is never allowed in individual assignments. If you are writing up a discussion, do NOT copy/paste from a website or other source. If you need to use someone else's words, put them in quotes and footnote the source. Your own words should constitute the majority of the work that you turn in.

Submitted academic work may be subject to screening by software programs designed to detect evidence of plagiarism or collaboration.

Any student found to be in violation of academic integrity will receive a zero for the assignment. Repeated offenses may result in an F for the course. **Please note that I enforce academic integrity and plagiarism will not be ignored! If you have any questions about this policy, please ask me.**

Practice Test and Chapter Test Structure

There are 40-50 questions in each individual chapter's question pool. The practice test draws 20 questions at random from that question pool. The actual chapter test you take will contain about ~25 questions.

Grading and Evaluation Criteria	
Chapter Tests	70 pts (5 points for each of 14 chapter tests)
Book Review Midterm	80 pts
Book Selection	10 pts
Project Update	10 pts
Project Report	60 pts
Final Exam	70 pts
Participation	15 pts
Blackboard Site Ready	15 pts
Intro Post	15 pts
BB Site Ready Test	15 pts
Lab leads	60pts
<u>Lab log</u>	60pts
TOTAL	400 pts

The following percentage scale is used:

94 – 100 A

90 – 93 A-

87 – 89	B+
84 – 86	B
80 – 83	B-
77 – 79	C+
74 – 76	C
70 – 73	C-
67 – 69	D+
64 – 66	D
60 – 63	D-
<60	F