

ISM 324-02: SECURE NETWORKED SYSTEMS
SPRING- 2020

Thursdays –: 6:00 PM – 8:50 PM, BRYAN 105 (Bryan Building)

INSTRUCTOR INFORMATION

Name: Dr. A. F. Salam
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Contacting the Instructor: Please email the Instructor if you have any questions
Office Hours: Thursdays 4:45 PM – 5:45 pm or by appointment

CATALOG DESCRIPTION

Networking and telecommunication concepts are described. Technical and organizational activities for securing distributed systems are presented. System security and information assurance methodologies, procedures and best practices are studied.

COURSE OBJECTIVES

Upon successful completion of this course students will be able to:

1. Understand the basics of security and overview of networking layers and communications and data communications
2. Identify threats to information assets including malware and social engineering
3. Explain and apply TCP/IP architecture and the Internet model
4. Explore control types and methods
5. Understand cryptography
6. Explain securing your network and data
7. Develop business continuity plans

REQUIRED TEXTBOOK

1. CompTIA SECURITY+ Get Certified Get Ahead Study Guide by Darril Gibson,
EDITION 2017. ISBN-13: 978-1-939136-05-3.

NOTE: Students can order the Required Textbook through the UNCG Bookstore Website

2. Other Readings: Reading materials will be posted on Canvas. Students will be notified via email and Canvas Announcements.

TEACHING METHODS

- This course will be delivered by mixing lectures, exercises, group activities, in-class activities, out-of-class activities and exams. Lectures will give students basic understanding of network and security topics. Students are encouraged to use materials and resources outside of the required textbook to assist in their learning. Students are strongly encouraged to actively participate in in-class discussions and activities.
 - **Students are required to attend every class session** and to participate in the discussions. In class quizzes/exercises will be used to check on class participation. Class exercises are unannounced. **No makeup exercises will be given. All in-class lectures, discussion, in-class activities and out-of-class activities and materials will show up in exams. In-class activities may include LABs using Cisco Packet Tracer Software.**
 - Assignments, participation in in-class discussion and activities and exams will be used to evaluate students' performance.
- **HOMEWORK ASSIGNMENTS and GROUP PROJECT**
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- Homework assignments should be submitted on or before the "due date" via Canvas upload. Homework assignments **will not be accepted late regardless of circumstances.** Non-submission counts as a zero score for the assignment.
- Group Project will consist of a short paper and a presentation by the Group. The details about the Group Paper and Presentation will be provided in time. Each Group will consist of 3 to 4 students.

EXAMINATIONS

- There will be two exams (Midterm and Final). Although, the final exam is cumulative, it will be more focused on the material up to the preceding exam. All exams will be closed book, notes, laptops, PDAs, etc. All students are required to abide by the UNCG Academic Integrity Policy in terms of ALL Graded Activities including Exams, Assignments and any graded activities (in-class or out-of-class).
- **No makeup exams will be given.** It is impossible to make an equivalent exam without the student at either an advantage or disadvantage. *If you miss an exam without a valid excuse, then your grade for that exam will be zero.* If you miss an exam with a valid excuse and provide proper documentation to the instructor, your final exam grade will be used as the grade for the missed exam. **Documentation must be given to your instructor no later than one week following the missed exam.** Examples of valid excuses are *serious illness, death in the direct family, and participation in University sponsored events.* Examples of valid documentation are a doctor's note, memo from the school Athletic Dept, etc. **No makeup exams will be given under any circumstance.**

DETERMINATION OF COURSE GRADES & GRADING SCALE

The following provides a percentage allocation of each component:

	Percent	Points
Homework Assignments	15%	150
Group Project	10%	100
In-class exercises, LABs and participation:	10%	100
Midterm Exam:	30%	300
Final Exam (cumulative):	35%	350
Total	100%	1000

Points	Grade	Points	Grade	Points	Grade	Points	Grade
96-100%	A	87 < 90%	B+	77 < 80%	C+	67 < 70%	D+
90 < 96%	A-	83 < 87%	B	73 < 77%	C	63 < 67%	D
		80 < 83%	B-	70 < 73%	C-	60 < 63%	D-
						Below 60%	F

The syllabus operates as our document of mutual understanding; it represents our agreement. Changes may be made to it as our progress dictates. Such changes will be discussed in class and class members will be responsible for all changes.

FACULTY AND STUDENT GUIDELINES

(for complete information, see

https://bryan.uncg.edu/wpcontent/uploads/2017/08/faculty_student_guidelines.pdf)

The administration, faculty, staff, and students of the Bryan School of Business and Economics at UNCG are committed to professional and ethical behavior in all areas of their academic and professional lives. The principles and expectations established in this document and the addendums encompass many aspects of professional behavior and integrity. It is not an exhaustive list, since change is part of life both inside and outside the university. This set of Guidelines constitutes a statement of values and expectations; concerns and issues are still best addressed by conversations between the individual faculty member and student. If further discussions are necessary, please contact the faculty member's Department Head.

EXPECTATION OF STUDENTS

Students in the Bryan School must conform to all existing principles found in UNCG's Academic Integrity Policy and the Student Code of Conduct.

Academic Integrity Policy

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. A student is subject to penalty for academic misconduct, such as illicit possession of exams or exam materials, forgery, or plagiarism. Plagiarism is the presentation of the work of another, as one's own work. Discussing your assignments with other students can be a valuable learning resource; however, each student is expected to do their own original work. It is the student's responsibility to prove their work is original, if challenged.

All students are required to follow the provisions of the UNCG Academic Integrity Policy (<https://osrr.uncg.edu/academic-integrity/>) in completing coursework. If you do not know the provisions of the Academic Integrity Policy, make time to study it.

ATTENDANCE POLICY:

Each student is responsible for all the information and announcements that are made in class as well as through UNCG Canvas Learning Management System and UNCG Email System. Poor attendance causes poor performance in this course. Any student missing the first class without notifying the instructor will be administratively dropped from the course. Any student missing more than three classes (excused or not) may have their grade dropped by a letter grade. **No makeup class exercises/quizzes/exams will be given under any circumstances.**

DISABILITY SERVICES:

If you have any type of learning or physical disability, please contact the UNCG Office of Disability Services in Suite 208 EUC. You must register/petition with them first. The Disability office will contact us once your request is approved.

FLEXIBLE AND TENTATIVE COURSE OUTLINE**(SUBJECT TO CHANGE DEPENDING UPON THE PROGRESSION OF THE CLASS)**

Week	Date	Topics	Homework Due
1	Jan-16	Review syllabus and course content Overview and Fundamentals of Communication Networks Class Lecture and Discussion	
2	Jan-23	Local Area Network: Ethernet and Fundamentals of TCP/IP Model Hubs and Layer 2 Switch Class Lecture and Discussion	
3	Jan-30	Local Area Network: Ethernet and Fundamentals of TCP/IP Model IP Addressing and TCP and TCP Connection Class Lecture and Discussion Hands-on Cisco Packet Tracer Lab in-class Activity Note: MUST Bring Your Laptop to Class	
4	Feb-06	Interconnecting Local Area Networks and TCP/IP Model IP Addressing and Routers and Subnet Design Class Lecture and Discussion Hands-on Cisco Packet Tracer Lab in-class Activity Note: MUST Bring Your Laptop to Class	Assignment I Released
5	Feb-13	Understanding Basic Network Security and Securing Your Network Reading: SE Chapter 3 Class Lecture and Discussion	
6	Feb-20	Understanding Basic Network Security and Securing Your Network Reading: SE Chapter 4 Class Lecture and Discussion	Assignment I Due
7	Feb-27	GROUP PROJECT DAY	
		Spring Break – No Class on March 4 (Wed)	
8	Mar-12	Midterm Exam (Tentative)	

