

ISM 673: Design of Secure Computer & IoT Networks for Business

Fall 2022 (Sections 673-01 & 02 HYFLEX)

“FACE TO FACE AND ONLINE SYNCHRONOUS”

SET MEETING TIME FOR CLASS Thursdays 6:30 – 9:20 pm

Face to Face Section Room: Bryan 216 (Hyflex Classroom)

**ATTENDANCE REQUIRED FOR BOTH
FACE TO FACE (SECTION 673-01)
AND SYNCHRONOUS
ONLINE STUDENTS (SECTION 673-02)**



NOTE: Face to Face students (Section 673-01) MUST be present in the Classroom in Bryan 216 for every class meeting
NOTE: Online Synchronous (Section 673-02) students MUST be present via ZOOM for every class meeting

Instructor: Dr. A. F. Salam
Associate Professor of Information Systems, ISSCM Dept., Bryan School

E-Mail: amsalam@uncg.edu (email is the PRIMARY method of contact)
*Note: Please send email directly and NOT via Canvas
Every effort will be made to respond to email within 48 hours*

Phone: (336) 334-5666

Office Hours: Thursdays 5 pm to 6 pm (Bryan 427 and via ZOOM) and by appointment (send email to amsalam@uncg.edu)

Catalog Description:

Technology related to internal and external network/telecommunication services. Managerial and business issues related to the identification, acquisition, and management of network/telecommunications services in the contemporary enterprise.

Course Objectives:

The objectives of this course are to provide students with theories and concepts related to Telecommunications and Distributed Networks in the context of business enterprises.


Upon completion of the class, students will be able to:

1. Describe the role of telecommunications, network and IOT technologies, and services in business organizations.
2. Evaluate cost of technology procurement and the technology infrastructure of the firm.
3. Analyze existing technology and technology trends for potential impact on securing communications services.
4. Analyze adequacy of telecommunications and communications infrastructure in meeting the needs of the enterprise.
5. Analyze organizationally appropriate assured communications services and management.
6. Evaluate the issues facing Chief Information Officers in assuring the development and ongoing adequacy of the firm's telecommunications and network and IOT infrastructure.

Note: Please Log into UNCG Canvas and then ISM 673-03 Course Site for details about the course and free software and other requirements. Entire Course Schedule for the Fall 22 Semester will be available on the ISM 673-03 Canvas Course Site.

Fall 2022 ISM 673 03 (2 required)
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Professor SALAM



REQUIRED

Network Security, Firewalls, and VPNs

By Stewart, J. Michael / Kinsey, Denise
Edition : 3RD 21
Publisher : JONES+BART
ISBN 13 : 9781284183658

Print

\$99.95 New Print \$74.96 Used Print

Rental

\$67.95 New Print Rental Return by 12/08/22 \$49.40 Used Print Rental Return by 12/08/22


Digital

\$64.97 Digital Purchase Online access for 365 Days, perpetual offline download access \$49.98 Digital Rental Expires in 180 Days **Digital Rights**

\$29.98 Digital Rental Expires in 30 Days \$39.98 Digital Rental Expires in 60 Days **Digital Rights**

\$44.98 Digital Rental Expires in 90 Days **Digital Rights**

ADD TO CART



REQUIRED

Fundamentals of Communications and Networking

By Solomon, Michael G. / Kim, David
Edition : 3RD 22
Publisher : JONES+BART
ISBN 13 : 9781284200119

Print

\$99.95 New Print \$74.96 Used Print

Rental

\$82.45 New Print Rental Return by 12/08/22 \$49.90 Used Print Rental Return by 12/08/22

Digital

\$64.97 Digital Purchase Online access for 365 Days, perpetual offline download access \$49.98 Digital Rental Expires in 180 Days **Digital Rights**

\$29.98 Digital Rental Expires in 30 Days \$39.98 Digital Rental Expires in 60 Days **Digital Rights**

\$44.98 Digital Rental Expires in 90 Days **Digital Rights**

Required Textbooks for Fall 2022

In addition to the Textbook, reference and reading materials may be made available on Canvas to supplement assigned reading materials. Students will also be asked to read materials made available via selected web sites. All reading assignments should be completed during the week in which they are assigned.

General Preparedness:

Students are expected to complete all assignments and participate in online discussions when they are assigned. Students are expected to be prepared by reading class materials the week they are assigned. Each student is responsible for all of the reading assignments, information and announcements that are made on Canvas and through emails. Announcements are frequently posted. **Students are expected to conduct themselves in a professional manner at all times especially in online discussion forums, group activities (if any), etc.**

Active participation in discussion forums is a critical and integral part of this course. Your thoughtful and well-reasoned discussion post or comments or suggestions or questions stimulates further discussion and alternate consideration of the discussion topic. Trivial posts or comments will be severely discounted in terms of earned points in the discussion forums. Trivial posts include just some bullet points that do not add to the discussion of the topic or which does not encourage further consideration by others in the forum. It is strongly encouraged that each student considers thoughtful response to posts by other students in the class or in the discussion forum. But do maintain professional manner in your posts or comments or responses even if you disagree. We can disagree but we must always maintain the highest standards of professionalism and respect towards each other. We all learn by intelligently considering alternate views and perspectives. We all are professionals and we must conduct ourselves professionally at all times especially when we interact with each other. Please also consider the challenges that we all are facing during this unprecedented COVID-19 environment.

Late Work:

Late work will NOT be accepted unless arranged with the instructor prior to the due date of the assignment/exam/project. Late work will receive a 0 (at the sole discretion of the instructor).

If late work is permitted (at the sole discretion of the instructor), late work will be penalized 5% for every day late, unless previous written arrangements are made with the instructor. No assignment will be accepted after the last official day of class unless otherwise stated by the instructor; this does NOT include final exam week.

Note: If you are affected by COVID-19, please contact the Instructor immediately or as soon as you are able. Instructor will work with the affected student under the Policies and Guidelines adopted by UNCG in relation to COVID-19 in Fall 2022.

Participation and Attendance:

Participation accounts for 15% of the total grade. Participation is based on in class discussions (both for face to face students and for students participating via ZOOM). Participation will be graded based upon consistency (participating in all of the assigned discussions) and quality. Face to face and Online Synchronous (via ZOOM) students are required to attend every class meeting on Thursdays from 6:30 pm to 9:20 pm. Attendance is required. There may be some participation that may require posting comments or solutions on Online Discussion Forums of the course.

Assignments:

Students will be required to complete multiple **individual** assignments. Assignments typically involve a set of specific tasks. All assignments and projects are expected to be completed on time. Students must strictly follow all directions and requirements for each assignment completion and submission via Canvas. Failure to follow assignment completion and submission directions can **severely lower** earned grade or points for each assignment at the sole discretion of the instructor. Please note that this is a Graduate course and therefore high standards of quality in completion, writing, presentation and submission of each assignment are expected as a norm. UNCG Academic Integrity Policy (<https://osrr.uncg.edu/academic-integrity/>) must be clearly followed and executed by each student for each graded assignment, midterm and final exams or any other graded work assigned by the instructor.

Note: There may be in-class activities that students can only participate in if they are present in class at that session. If a student is absent from such in-class activities, then the student will NOT receive any credit for that specific in-class activity or activities. These may be individual activity or group-based activity. No excuse can be entertained as these activities are bound for that specific class session. For example, students might be divided in consulting groups to design Secure Networks for a city or multiple cities or organizations as part of in-class activity or activities.

Midterm and Final Exams:

The midterm and final exams are written exams. No make-up examinations are offered unless a written, verifiable, legitimate excuse for the absence is presented to the instructor or written arrangements are made beforehand. Due to the cumulative nature of the course materials, the final exam may include content covered prior to and on the midterm. The exams will consist of content from the required text and other assigned readings, video lectures posted on canvas and materials covered in assignments including discussion forums.

Course Schedule: Canvas Main Page for ISM 673 course is structured to reflect the entire course schedule for Fall 2022.

You will find Weekly reading assignments and any other course related items on this page.

Note: Students are required to check Canvas Main Page (Home Page) for ISM 673 and emails on a daily basis to ensure that they do NOT miss any assigned items. Please contact the Instructor directly by email if you have any questions. Send email directly to: amsalam@uncg.edu

Note: Both the course content and course schedule subject to change depending upon class pace at the sole discretion of the instructor

Grading:

Your final grade is determined using the following scale and deliverable weights (subject to change depending upon class activities):

Components of Final Grade	Percentage of Final Grade
Discussion Participation (150 points) & in-class activities	15%
Assignments (3 @ 100 points each) (Individual) – 300 points	30 %
Midterm Exam – 250 points	25 %
Final Exam – 300 points	30%
Total Points: 1000	100%

The relationship between total points and letter grades is as follows:

95 <= X < 100	A
90 <= X < 95	A-
87 <= X < 90	B+
83 <= X < 87	B
80 <= X < 83	B-
76 <= X < 80	C+
70 <= X < 75	C
0 <= X < 60	F

CompTIA Network+ Exam:

You may take the CompTIA Network+ exam. Taking the CompTIA certification exam is entirely optional. Instructor strongly encourages students to complete the CompTIA Network+ exam either during or after the semester is over.

Ethical Issues and the Honor Code Policies:

University students are expected to conduct themselves in accordance with the **highest standards of academic honesty**. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, forgery, plagiarism, etc. Although students are allowed to work with others on team projects, students may NOT borrow, or "share". Students will receive a 0 for the deliverable if misconduct is proven. Students should read and must follow the UNCG Honor Code.

Plagiarism is defined as "presenting as one's own work that work which is, in whole or in part, the work of another person or persons without giving proper credit to the appropriate source." This includes submitting work done by another as one's own work. It is understood that what you turn in to me for a grade represents your own effort. Plagiarism will be immediately punished with a 0 for the assignment in question. Further disciplinary action will be pursued as the instructor deems appropriate. **No credit will be received for shared work, and other penalties may be imposed by UNCG as per UNCG Academic Integrity Policy.**

Please Read Carefully:

This course also has some additional sensitive issues owing to the unique nature of networking and security. You may NEVER attempt to penetrate or conduct class activities that affect the UNCG network or any network that you do not own (such as your home network) or for which you have no written permission from appropriate enterprise authorized personnel. In this course, we ONLY use Cisco Packet Tracer (CPT version 7.3.1) that runs on your own computer and you can build any complex network using this free software.

UNCG's academic integrity policy can be viewed at: <http://academicintegrity.uncg.edu/complete/>

Bryan Faculty/Student Guidelines:

Faculty and students at UNCG have certain obligations. Please view these obligations and guidelines at: http://www.uncg.edu/bac/faculty_student_guidelines_sp07.pdf

Disabilities:

If you have a documented disability and wish to discuss academic accommodations, please contact the UNCG Office of Accessibility Services (<https://ods.uncg.edu>) and immediately notify the instructor as well via email (amsalam@uncg.edu).

Inclement Weather:

Rarely, UNCG closes for inclement weather. The radio and TV stations will have the closing notification by 6:30 am. You may also call 334-5000 for a message related to weather closings. These messages are updated hourly.

* This syllabus and course schedule are subject to change as needed and depending upon class progress and evolving COVID19 situation.

Required UNCG Syllabus Language for Fall 2022

As we return for Fall 2022, all students, faculty, and staff and all visitors to campus are required to uphold UNCG's culture of care by actively engaging in behaviors that limit the spread of COVID-19. While face-coverings are optional in most areas on campus, individuals are encouraged to wear masks. All individuals and visitors to campus are asked to follow the following actions:

- Engaging in proper hand-washing hygiene.
- Self-monitoring for symptoms of COVID-19.
- Staying home when ill.
- Complying with directions from health care providers or public health officials to quarantine or isolate if ill or exposed to someone who is ill.
- Completing a self-report when experiencing COVID-19 symptoms, testing positive for COVID-19, or being identified as a close contact of someone who has tested positive.
- Staying informed about the University's policies and announcements via the COVID-19 website.

Students who are ill, quarantining, or isolating should not attend in-person class meetings but should instead contact their instructor(s) so alternative arrangements for learning and the submission of assignments can be made where possible. As we continue to manage COVID-19 on our campus, we are following the lead of the local health department and we will adjust our plans to balance student success, instructional requirements, and the hallmarks of the collegiate experience with the safety and wellbeing of our campus community.

