INFO 3229 – 001  
Business Data Communications and Information Security  
Fall 2021

INSTRUCTOR: Dr. Sungjune Park  
OFFICE: 353B Friday  
PHONE: (704) 687-7628  
EMAIL: supark@uncc.edu

OFFICE HOURS: Tue, Thu 12:00 pm – 1:00 pm (Main Campus or via Zoom),  
  Tue 4:30 pm – 5:30 pm (Center City), and  
  by appointment via Zoom

CLASS HOURS: Tue & Thu 2:30 pm - 3:45 pm, Friday 339

COURSE DESCRIPTION

A study of the current and potential impact of computer data communications technologies and information security on business operations and productivity. Topics include: designing, planning and implementing solutions in such areas as local area networks, networked applications, and information assurance.

Prerequisites: INFO 3130 with a grade of C or above.

LEARNING OBJECTIVES

The objective of this course is to provide a basic understanding of the technical and management aspects of business data communications and networking. It will include the study of the business impact of data communications technologies on organizational operations and productivity. By the end of the course you will be able to:

- Explain how networks such as the Internet move messages from one computer to another through the different hardware and software components
- Design networks using a variety of LAN, backbone and WAN technologies and components
- Understand the risk of security breaches and suggest solutions with appropriate tools and techniques.

REQUIRED MATERIALS

- Additional notes and online resources will be posted on Canvas as needed.
GRADING

<table>
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<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exams (3)</td>
<td>600</td>
</tr>
<tr>
<td>Assignments and Quizzes (5)</td>
<td>150</td>
</tr>
<tr>
<td>Project</td>
<td>150</td>
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<tr>
<td>Project Presentation</td>
<td>50</td>
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<tr>
<td>Class Participation/Attendance</td>
<td>50</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>1000</strong></td>
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Final grades will be based on the following scale.  

EXAMS

Exam dates (Sep. 30, Nov. 4, & Dec. 7) are fixed unless there is an unexpected event such as university closing. You may have an opportunity to take a make-up test if you provide legitimate and documented reasons. The format of make-up exams may differ from the format of the regularly scheduled exam. Permission must be obtained from the professor prior to the scheduled exam time.

Exams are **closed** book and notes when they are administered in class. If any exam (including make-up exams) has to be administered remotely due to unexpected events, an oral exam may replace all or part of it. The instructor will keep all exams. However, exam reviews are available during office hours or by appointment for 10 days after exam grades are posted. All exam grades will be posted on Canvas.

ASSIGNMENTS AND QUIZZES

Each student must develop his or her own solutions to the assigned homework. Students may not "work together" on homework assignments. Such collaboration constitutes cheating unless it is a group assignment. A student may not use or copy (by any means) another's work (or portions of it) and represent it as his/her own.

To ensure that students stay on track with their learning goals for this class, the instructor will give short quizzes during the semester. These quizzes will focus on the current topic, assigned readings, and review questions. Quizzes are usually given on Canvas before the topic is covered in order to facilitate the class discussions.

Homework deadline is always at the beginning of the class when it is due unless specified by the instructions. In the case of a late submission on the same day, 20% of the points earned from the submission will be deducted. After the due date, the late homework may be accepted, but with a 50% penalty. Once the grade is posted or a week has passed after the due date, whichever comes first, you will receive a 0 for the late assignment.
GROUP PROJECT

Each student will form a group of three or four for a research project related to data communications and information security. The purpose of the project is to provide an opportunity for you to extend your knowledge on fast-evolving data communication technology and various information security issues. Each group will submit a written report and have an oral presentation. More details about the group project will be posted on Canvas.

All members of the group are expected to contribute to the project. If a member of your group does not contribute, you must ask him/her to leave your group and notify me before Nov. 17. I will assign him/her an individual project instead of the group project whose maximum grade will be a B.

WORKLOAD

Just as any courses require understanding of technical concepts, learning how networks work is challenging. Learning technical concepts is not something that you can put off until the night before the exam, and the knowledge is built only by developing familiarity with those concepts. Put in as much time as necessary in order to understand how networks operate and to be better prepared for the exams. I expect that you will spend 6 hours per week on average outside of class time for reading assignments, projects, and exams. The textbook and web materials will provide you with enough information about network technology, so I will be using the class time mostly to fill in any gaps that you experienced while reading the materials. Class participation is thus very important and will be counted toward your grade.

Students are expected to attend every class and remain in class for the duration of the session when it is safe to do so in accordance with university guidance regarding COVID-19. Failure to attend class or arriving late may impact your ability to achieve course objectives which could affect your course grade. An absence, excused or unexcused, does not relieve a student of any course requirement. Regular class attendance is a student’s obligation, as is a responsibility for all the work of class meetings, including tests and written tasks. Any unexcused absence or excessive tardiness may result in a loss of participation points.

Students are encouraged to work directly with their instructors regarding their absence(s). For absences related to COVID-19, please adhere to the following:

- **Complete your Niner Health Check** each morning.
- **Do not come to class if you are sick.** Please protect your health and the health of others by staying home. Contact your healthcare provider if you believe you are ill.
- **If you are sick:** If you test positive or are evaluated by a healthcare provider for symptoms of COVID-19, indicate so on your Niner Health Check to alert the University. Submit a copy of your Niner Health Check notification email to your instructors. Upon learning that you have tested positive or have been diagnosed for symptoms of COVID-19, either from your reporting or from Student health
Center testing or diagnosis, representatives from Emergency Management and/or the Student Health Center will follow up with you, and your instructors will be notified of the need for accommodations, as necessary.

- **If you have been exposed** to COVID-19 positive individuals and/or have been notified to self-quarantine due to exposure, indicate so on your Niner Health Check to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary. Submit a copy of your Niner Health Check notification email to your instructors. If you need any additional support verifying your absence after you have communicated with your professors, contact Student Assistance and Support Services.

To return to class after being absent due to a period of **self-quarantine**, students should submit a copy of their Niner Health Check clearance email to their instructor(s). To return to class after being absent due to a COVID-19 **diagnosis**, students should submit an online request form to Student Assistance and Support Services (SASS). Supporting documentation can be attached directly to the request form and should be from a student's health care provider or the Student Health Center, clearly indicating the dates of absences and the date the student is able to return to class. Instructors will be notified of such absences.

If you are absent from class as a result of a COVID-19 diagnosis or quarantine, as instructor I will do the following to help you continue to make progress in the course:

- Extend the deadline of assignment and provide make-up exam on a case-by-case basis.
- Give a high priority when schedule meetings during office hours.

The final decision for approval of all absences and missed work is determined by the instructor.

**CLASS DELIVERY METHOD**

Students who enroll in face-to-face classes are expected to participate in person — just as they were before the pandemic. Students who believe they need disability accommodations in their face-to-face classes should contact the Office of Disability Services at 704-687-0040 or disability@uncc.edu.

Only in extremely rare situations may a faculty member alter course delivery and only after they have provided appropriate justification that has been reviewed and approved by the dean. Faculty do not have the authority to make course format changes informally without consultation with their dean.

There will be no **live streaming or recordings** of classes unless the delivery format completely switches to online delivery mode.

To protect the privacy of other students, students are not permitted to make their own recordings of class sessions or to share or distribute University recordings of class sessions. Students with specific electronic recording accommodations authorized by the
Office of Disability Services may record classes; however, the instructor must be notified of any such accommodation prior to recording. Any distribution of such recordings is prohibited. See University Policy 402, Student Education Records (FERPA).

CLASS CONDUCT

Disruptive behavior in class distracts from the ability of others to profit from their in-class experience. Such disruptive behavior includes arriving late, leaving early, cell-phone interruptions, checking e-mail, surfing the net during the class, spending class time working on assignments for other classes, side conversations between two or more students during lecture, unnecessary comments that add no value to class, and any activities that negatively impact the ability of other students to learn and/or listen in class. Such behavior will be considered rude and inappropriate and will not be tolerated.

I will take very seriously any distraction caused by violating the above policies. Any member of the class should feel free to let me know if any behavior of fellow student(s) is distracting her/his learning experience. Such complaints will be treated as confidential but will help me to take appropriate action to provide a positive learning environment in the class.

Since it is my responsibility to provide an environment that is conducive to learning for everyone in the class, I will deduct all participation points from the grade of any student who chooses to repeatedly distract others or create other disruptions. In particularly egregious cases, I will have the student permanently removed from the class and deduct up to a maximum of 15% of the final grade. To attend or not to attend is your decision to make, but once you decide to attend my class, you should refrain from any disruptive behavior during the class.

COVID-19 PROTECTION

It is the current policy of UNC Charlotte that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the 49er community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings in all indoor spaces on campus, including classrooms and labs, regardless of vaccination status. Failure to comply with this policy in the classroom or lab may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Office of Student Conduct and Academic Integrity for charges under the Code of Student Responsibility.

ACADEMIC INTEGRITY

All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in
disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at https://legal.uncc.edu/policies/up-407

Ownership of Course Materials

The lectures and course materials provided by the instructor including presentations, tests, quizzes, exams, videos, outlines, and similar materials are protected by copyright. The instructor is the exclusive owner of copyright in those materials instructor creates. You are encouraged to take notes and make copies of course materials for your own educational use. However, you may not, nor you may knowingly allow others to reproduce or distribute course materials publicly without instructor’s express written consent. This includes providing materials to commercial course material suppliers such as CourseHero, Chegg, etc. and other similar services. Students who publicly distribute or display or help others publicly distribute or display copies or modified copies of the instructor’s materials may be in violation of University Policy - 406, the Code of Student Responsibility.

GRADE APPEALS

If you believe that the grade you received on an assignment, exam or other graded course component was in error or unfair, you can appeal to the professor in writing within 10 calendar days of the receipt of your grade. The appeal should clearly state the reasons why you believe the grade to be unfair or the nature of the error. Overdue appeals will not be considered.

INCOMPLETE GRADE POLICY

The incomplete is not based solely on a student’s failure to complete work or as a means of raising his/her grade by doing additional work after the grade report time. An incomplete grade can be given when a student has a serious medical problem or other extenuating circumstance that legitimately prevents completion of required work by the due date. In any cases, the student's work to date should be passing, and the student should provide proper written proof (e.g., a doctor's note), in order to get an 'I' grade.

DISABILITY ACCOMMODATIONS

UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from Disability Services early in the semester. For more information on accommodations, contact the Office of Disability Services at 704-687-0040 or visit their office in Fretwell 230.

Title IX REPORTING EXPECTATIONS

UNC Charlotte is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence,
dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these incidents, know that you are not alone. UNC Charlotte has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with civil protective orders, and more.

Please be aware that all UNC Charlotte employees, including faculty members, are expected to relay any information or reports of sexual misconduct they receive to the Title IX Coordinator. This means that if you tell me about a situation involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking, I am expected to report the information to the Title IX Coordinator. Although I am expected to report the situation, you will still have options about how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

If you wish to speak to someone confidentially, you can contact the following on-campus resources, who are not required to report the incident to the Title IX Coordinator: (1) University Counseling Center (counselingcenter.uncc.edu, 7-0311); or (2) Student Health Center (studenthealth.uncc.edu, 7-7400). Additional information about your options is also available at titleix.uncc.edu under the “Students” tab.

**COURSE SCHEDULE**

The Instructor reserves the right to change the course contents and schedule. The up-to-date course schedule is available on Canvas. Important announcements, specific policies regarding exams, etc. are also available on Canvas. It is the student’s responsibility to be aware of any changes in the course schedule, course contents, and course policies by visiting Canvas regularly.

*The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.*
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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading Assignment</th>
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<tr>
<td>8/26, 8/31, 9/2, 9/7, 9/9</td>
<td>Layered Network Model / Virtual Lab with VMware Workstation / Application Layer</td>
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<td>Data Link Layer</td>
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