COSC 3342 – Network Design & Management
School of Engineering and Computer Science
Fall 2016

A. COURSE INFORMATION

Course number/section: COSC 3342 - 001
Class meeting time: TR: 12:30 PM – 1:45 PM
Class location: CI-226
Credits: 3

B. INSTRUCTOR INFORMATION

Instructor: Dr. Jeffrey Gordon
Office location: EN-316L
Office hours: R: 2-4 PM, F: 9 AM-12 PM (or by appt.)
Telephone: 361-825-3688 (x3688)
e-mail: Jeffrey.Gordon@tamucc.edu
Website: Blackboard (bb9.tamucc.edu)
Appointments: via email

C. COURSE DESCRIPTION

Catalog Course Description
A broad-based introduction to all major aspects involved in planning, implementing, and managing a local area network (LAN). Both logical and physical LAN technologies are covered including media options, physical topologies, network architectures and communication protocols.

D. PREREQUISITES AND COREQUISITES

Prerequisites
None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)

Please note, text books are required in class and cell phones, laptops and tablet like devices are not allowed during class.
F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

By the end of this course, students should be able to:

- Become familiar with current networking technologies such as architectures, standards, protocols, tools, and terminology.
- Be able to design and implement computer-based networks.
- Be able to maintain computer-based networks in popular network environments such as UNIX, Windows, Novell Netware, etc.
- Be able to support the maintenance of popular network services such as web servers, e-mail servers, ftp servers, etc., and
- Be able to understand information security threats and take preventive actions against such threats to protect hardware, software, and information resources available on a networking environment.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

Instructional methods will consist of lectures, in class exercises and homework assignments.

H. MAJOR COURSE REQUIREMENTS AND GRADING

Student learning outcomes will be measured through the use of homework assignments, exams, & quizzes, if necessary. Grading scale: A: 100-90, B: 89-80, C: 79-70, D: 69-60, and F: 59-0.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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<tbody>
<tr>
<td>2 Exams</td>
<td>40</td>
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<tr>
<td>Final Exam</td>
<td>25</td>
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<tr>
<td>Quizzes &amp; Participation</td>
<td>5</td>
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<tr>
<td>Assignments</td>
<td>30</td>
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# I. COURSE CONTENT/SCHEDULE

Tentative Course Schedule (Subject to change)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>08/25/16</td>
<td>Chp 1 - Introduction – Data Communication, Data Networks, and the Internet</td>
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<tr>
<td>08/30/16</td>
<td>Chp 2 – Protocol Architecture – TCP/IP, and Internet-Based Applications</td>
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<td>09/06/16</td>
<td>Chp 3 – Data Transmission, HW1</td>
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<td>09/13/16</td>
<td>Chp 4 – Transmission Media</td>
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<td>09/20/16</td>
<td>Chp 5 – Signal Encoding Techniques, HW2</td>
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<td>09/27/16</td>
<td>Chp 6 – Error Detection and Correction</td>
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<td>Exam 1</td>
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<td>10/04/16</td>
<td>Chp 7 – Data Link Control Protocols, HW3</td>
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<tr>
<td>10/11/16</td>
<td>Chp 8 - Multiplexing</td>
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<td>10/18/16</td>
<td>Chp 9 – WAN Technology, HW4</td>
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<td>10/25/16</td>
<td>Exam 2</td>
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<td>Chp 10 – Cellular Wireless Networks</td>
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<td>11/01/16</td>
<td>Chp 11 – Local Area Network Overview, HW5</td>
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<td>11/08/16</td>
<td>Chp 12 - Ethernet</td>
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<td>11/15/16</td>
<td>Chp 13 – Wireless LANs, HW6</td>
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<td>11/22/16</td>
<td>Reading Day, No Class</td>
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<td>Thanksgiving Holiday, No Class</td>
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<tr>
<td>11/29/16</td>
<td>Chp 14 – The Internet Protocol, HW7</td>
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<tr>
<td>12/06/16</td>
<td>Chp 15 – Transport Protocol</td>
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<td>Final Exam: Tuesday December 13 from 11:00 a.m. – 1:30 p.m.</td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.
J. **COURSE POLICIES**

**Course Syllabus:**
We will meet in lecture on Tuesdays and Thursdays, when new material will be presented. We will follow the material posted on the course website and other material handed out in the class. The assignments and exams will be given during the class hours. You are responsible for all the material presented during the lecture.

**Exams:**
Exams will cover all lecture and reading material discussed in the class. Exams must be taken on the hour they are scheduled. In the event, if you cannot attend the class to take the exam due to some emergency or some unavoidable situation (such as serious illness, death in the family, participation in university sports, religious observations, and so on) you must notify me as soon as possible before the exam and also you must validate your absence by providing me a document (e.g., with a letter from your doctor).

**Homework Assignments and Quizzes:**
Assignments will significantly build on the material from the lectures. They will be posted on the course web page or hard copies are handed out in the class during the lecture sessions. Please refer to the handout on programming assignments for complete details on submission requirements. (Details decided per assignment). All the assignments are due at the beginning of the class on the due date. If the student is absent on the assignment due date, it is the student’s responsibility to see to it that the assignment is submitted on the designated date. An assignment that is turned in after the class on the due date is considered one day late. There is a penalty for late submissions. Late assignments will be counted 20% off for each day after the due time. 100% penalty (i.e. no credit) if submitted after 5 days. If you have not completed your assignment by the due date, you should submit the work you have done for partial credit. No work will be accepted once the graded work has been returned or the solution has been disclosed to the class, except for unusual circumstances which the instructor feels reasonable. Note that any kind of hardware or software failure or machine unavailability in the lab does not merit an extension on the assignment. Files/Documents upon which major examinations, assignments, projects or papers are submitted may be retained by the instructor as a permanent record of the student’s work. Pop quizzes are given in-class only and cannot be made up. Missed quizzes receive a 0, if not taken.

**Grading Error:**
All questions concerning a test score or grading of a returned test or assignment must be resolved within one week. It is always a good idea to keep all of your work until the end of the semester. In case of any recording errors or doubts, you may produce them for correction or verification.

**Last date to withdraw:** Friday, November 11, 2016 & receive an automatic grade of W.

**Academic Honesty Policy:** You are expected to avoid all forms of academic dishonesty as defined in Catalog. In addition, students are expected to behave in an ethical manner in all class activities. If you feel uncertain about a particular activity, please speak to me BEFORE problems arise. Ethical behavior is a requirement for passing this course. All work submitted for grading must be the
student’s own work. Plagiarism will result in a score of 0 (zero) for the work or dismissal from the course and the Dean of Students office will be notified. No copying from another student's work, of any class, is allowed. It is the student’s duty to allow no one to copy his or her work. Anyone found cheating and/or copying, in the exams or assignments, in the instructor’s opinion, will receive an automatic F for the course.

Collaboration: If two or more people collaborate on an assignment assigned it should be notified on the assignment and each student should submit his or her solutions for grading. The grade obtained on such an assignment is the total points obtained for the assignment divided by the square of the number of people who collaborated on the assignment (e.g., if 3 people collaborate on an assignment and the grade for that assignment is 90 out of 100, then each student receives a grade of $90/3^2 = 10$). If you do not notify me of such collaboration it will be treated as copied and action will be taken as discussed under the academic honesty policy.

Attendance: You must attend all classes. In class attendance will affect your grade. You are responsible for any materials covered or handed out or announcements made for the tests, homework assignments in your absence. Records of your attendance will be maintained and reported to the university. Students found missing classes without the instructor’s permission will be automatically withdrawn from the course.

Absence from class: Students are responsible for all materials covered in class and assigned. Should a student be absent from class, it is his/her responsibility to get the notes, etc. for that missed class. More important, should there be assignments, it is the student responsibility to obtain such assignments. No excuse will be accepted for assignments not turned in because the student was absent when it was due.

Other Policies: Cell phones and computers must be turned off during class. Audio and video recording of any kind is not permitted in the classroom. First violation receives a warning. All succeeding violations result in a ten-point deduction off the final exam. Any violation during a quiz or exam results in a ten percent deduction off the corresponding paper. No warnings for quizzes or exams.

COLLEGE AND UNIVERSITY POLICIES

• Academic Integrity (University)
  It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior. See Full University Policy at: http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity

• Classroom/Professional Behavior
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This
prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility (can be in place of classroom/professional behavior)**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **Deadline for Dropping a Course with a Grade of W (University)**
  The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
  The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116. If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816. http://disabilityservices.tamucc.edu/
• **Statement of Academic Continuity**
  In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

• **Academic Advising:** The College of Science and Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair.

**GENERAL DISCLAIMER**

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.