



# Class Syllabus

## CIS 122 Intro to Wide Area Networks

Fall 2008

John Kowalski

Tuesday, 6:15 – 10:00 p.m., AJT 206

**Instructor:**

John Kowalski

**Office:**

Room 210A A. J. Theisen Building

**Phone:**

To be given in class

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**Contact Hours:** Tuesday 5:25 p.m. – 6:15 p.m.      Other Times by Prior Arrangement

**Text:** Wide Area Networks, Carol Trivedi

**Description:**

Participants in this course will learn the technologies used to move voice, data and video across long distances. They will discover important new technologies such as Asynchronous Transfer Mode (ATM) that integrate voice, data and video communications. You will learn the basic concepts of how information is transported over a WAN from physical layer to application layer, and how these technologies work.

**Prerequisite:** CIS 120 4 credit hrs 4 contact

**Course objectives**

1. Describe today's telecommunications infrastructure.
2. Describe the relationship between telecommunications networks, cable television networks and wide area data networks.
3. Identify and describe the technologies used for communications.
4. Define and describe in detail the lower 3 layers of the OSI model.
5. Design a WAN given various situations.
6. Describe the features of routers, switches, MUXs, CSU/DSUs and modulator/demodulators.
7. Analyze traffic data and determine bandwidth needs.

**Classroom Policies:**

All students are expected to conform to the College's Acceptable Use Policy which is posted on the college website at <http://www.sc4.edu/catalog/policies.htm> . The instructor will review this policy during the first class period, and then periodically through out the semester as needed. Students found to be in violation of this policy will receive disciplinary action, and possibly receive a zero for affected assignments and/or tests. The use of chat software such as Instant Messenger and Microsoft Messenger is NOT allowed at any time. Students are NOT allowed to download and/or install software on lab PC's. Cell phones are permitted, but they are not to be used inside of the classroom. I Pods and other music or MP3 players are not allowed in the class during discussions. The use of laptop computers for note taking is encouraged. All class instruction

materials are available in electronic format the use and convenience of the student. Chatting, answering e-mails and surfing the web do not constitute note taking and are not allowed. Recording is allowed provided that you notify the instructor of your intent to do so.

In short, students are expected to be responsible adults. They are expected to be respectful to their fellow students. Students who are being disruptive or disrespectful will be warned. If the behavior continues they will be ejected from the class.

### **Equipment:**

During the course of this class the student will need a storage media device such as a USB drive. Please note that the lab computers do not have recordable CD drives. Please ensure that all storage devices are clearly marked with your own name & contact information. It will be each student's responsibility to bring their disks to class. Please be aware that floppy disks, particularly if used or stored improperly, can fail, and that backup disks are always a good idea. In the event that disks are lost or damaged, it will be the student's responsibility to secure suitable replacements. Students will also be required to provide paper, pens, binders, and notebooks for class presentation/projects.

### **Attendance:**

Students are required to attend all classes. Attendance will have a direct impact on final grades. Roll may be taken at any point during the class period. In order to count as having attended class students must be present when roll is taken. It will be each student's responsibility to obtain copies of lecture notes and to complete all missed assignments without assistance from the instructor. Students who are not present will receive a zero for any in-class assignments they miss. Although it is occasionally necessary for a student to miss a test, students are advised to make all efforts to take all tests and examinations on the scheduled date. There will be no make up unit tests under any circumstances. Students who know in advance that they will miss multiple unit tests are encouraged to drop and take the class again at a later date. Mid term exams, final exams and college break schedules can be viewed on the college website at <http://www.sc4.edu/catalog/acadCalendar.html>. The grade of "I" or incomplete is rarely given. It will be up to the student to demonstrate extreme circumstances, which prevented them from completing the course. In order to qualify for an incomplete a student must have already completed 80% or more of the course work. The instructor will determine if the student qualifies.

### **Grading:**

Some assignments will be graded based on participation. If, in the opinion of the instructor, the student has made an honest effort and has participated in the project or activity, the grade of "100" will be assigned. If student does not participate they will receive a "0". All grading standards will follow the posted processes on the college website. Please reference <http://www.sc4.edu/catalog/acadRec.htm> for details or contact the department head or the Instructor for questions. Assignments are generally to be completed within 1 week. Late work will be accepted with a 25% penalty in scoring. Students who find it impossible to complete their work in a timely fashion should consider re-taking the course at a later date. In general, there will be an assignment every class period. Assignments will be made during class, and will reflect material covered by the day's reading and lecture. Tests may consist of a combination of true/false, multiple choice; fill in the blank, matching and short essay. Please note that there will not be a curve for this class. There may, however, be opportunities for extra credit at the discretion of the instructor. There will also be a 1,500 word essay in strict APA format with the topic being any WAN technology that the student chooses to write about.

## Final Grades:

Students will be evaluated based on their individual assignments, class participation, and exams. Point values for assignments, class participation, exams etc are as follows:

| Week | Item             | Points | Percentage |
|------|------------------|--------|------------|
| 1    |                  |        |            |
| 2    | Quiz             | 100    | 4%         |
| 3    |                  |        |            |
| 4    | Quiz             | 100    | 4%         |
| 5    |                  |        |            |
| 6    | Quiz             | 100    | 4%         |
| 7    |                  |        |            |
| 8    | Mid-Term         | 300    | 13%        |
| 9    |                  |        |            |
| 10   | Quiz             | 100    | 4%         |
| 11   |                  |        |            |
| 12   | Quiz             | 100    | 4%         |
| 13   |                  |        |            |
| 14   | Quiz             | 100    | 4%         |
| 15   |                  |        |            |
| 16   | Final            | 300    | 13%        |
|      | Term Paper       | 600    | 26%        |
|      | Misc Assignments | 500    | 22%        |
|      | Total            | 2300   | 100%       |

## Grading Scale:

|     |        |
|-----|--------|
| A   | 93-100 |
| A-  | 90-92  |
| B+  | 87-89  |
| B   | 83-86  |
| B-  | 80-82  |
| C+  | 77-79  |
| C   | 73-76  |
| C-  | 70-72  |
| D+  | 69-67  |
| D   | 63-66  |
| D - | 60-62  |
| F   | 00-59  |