

EETS 5301/EETS 7301

INTRODUCTION TO TELECOMMUNICATIONS

Semester: Fall, 2010, Classes starting on Campus: August 23, 2010

Office Visits: by appointment - please send an e-mail to mshwenholt@mail.smu.edu or call 214-394-4723 to schedule

Course Resource URL: TBA

Course Times: (Live, on Campus): Section 001: 12:30-1:50 MW Central Time, Room 0183 Caruth Hall

Textbook: Bates and Gregory, Voice and Data Communications Handbook, 5th Edition, www.amazon.com, www.buy.com, SMU

Prerequisites: One year of physics, especially one semester of Electricity & Magnetism (The MS in Telecommunications Program also specifies one year of calculus.)

Course Overview: Public and private analog and digital telecommunications systems, information formats and transmission

Description: Representation and movement of information from the Application layer through the Physical layer, signal transmission

Specific Topics: OSI and other system models, signaling systems, switching, modulation and multiplexing, EM waveform propagation, Fourier analysis and harmonics, antennas, optical transmission, network topologies and implementation, network components, transmission protocols, error management

Student Grades: Grades will be based on four 1-hour examinations. The highest three grades out of the four each will count for 30% of the course grade, and the lowest grade counts 10%. Grade ranges are A=>90, B=>80, C=>70, D=>60, F<60. (=> means "equal or greater than.")

A grade of "Incomplete" can be given in specific circumstances (such as extended illness), in which the student is passing in work completed, and extra time is needed for a regular grade. A student who does nothing is not eligible for an Incomplete. A special form must be completed jointly by the student and instructor in order for the Incomplete to be given. See the University policy concerning Incompletes as stated in the SMU Catalog.

Examinations are notionally scheduled for 9/22, 10/20, 11/17, & 12/1. Tests are based on material given in lectures, using PowerPoint video notes as an outline. 100% attendance or review of recorded classes is required for good notes. Each test will focus on material from the previous test forward through the last class before the next test, but fundamental concepts will be carried forward throughout the course. The last test (Final Exam) is comprehensive (i.e., cumulative) for the entire course. Test formats are TBA.

Test Questions: Students who desire to do so may submit prospective test and/or final exam questions by e-mail at least 4 days before each test. Questions must be non-trivial and non-ambiguous. Multiple choice questions must contain 5 alternative answers, one of which may be "None of the above." Matching questions must have more possible answers in the pool than questions, and no answer may be used more than once.

Class Attendance: Students are responsible for all material covered in class. Review of class lectures is required for all students. ALL students should view each class at least two separate times. The PowerPoint notes are no substitute for class attendance or for watching and listening to instructor's sketches & audio.

A person taking this course by media delay follows the same schedule as a campus student, except that the time scale is slipped by the amount of delay in getting the media, usually one day for Internet Streaming.

Section 418 is for employed students living in the Dallas Area. Students registered in this section must find a proctor at work or in a public library, or must take tests on campus with campus students. No "make-up" tests will be scheduled on campus. Off-campus proctors must have an approved Proctor Agreement Form on file in the Distance Education Office. The forms may be downloaded from http://lyle.smu.edu/academic/distance_coordinator.html

Disability Accommodations: If you need academic accommodations for a disability, you must first contact Disability Accommodations & Success Strategies (DASS) at 214-768-1470 or www.smu.edu/alec/dass.asp to verify the disability and to establish eligibility for accommodations. Then you must schedule an appointment with the professor to make appropriate arrangements.

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

Official Absences: Students participating in an officially sanctioned, scheduled University extracurricular activity will be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue). Please note that the third statement references a new policy passed by the Faculty Senate last year ensuring that students are not penalized in any way for excused absences and that they are informed at the beginning of the semester of their instructors' make-up policies. Attendance is mandatory for several reasons, including 1) safety is discussed in lectures and laboratories and 2) each student has their own wafers to process and test.