**Instructor.** Dr. Fred Owens. Bliss #2010. Hours are 10-12 M&W (to be found either in office or in TV studio); usually available for walk-ins; always by phone (941-1855, voicemail) and email (fowens@ysu.edu).

**Instructor's (course) web page:** [http://cc.ysu.edu/~fowens](http://cc.ysu.edu/~fowens)

**Text.** This semester, you will find all text materials either on the web or in libraries. Web-based materials will be mainly tutorials, product manuals, trade articles, podcasts/vidcasts or general interest “how-to’s.” In libraries you’ll find basic books about technology as well as a range of encyclopedias.

Printed books have the advantage of being contained between the front and back covers. Hypertext documents are different because they can link you to an unlimited number of other web-based materials. One of your challenges will be to learn how far to go beyond a particular site reference. Go to the specific directory to which you are linked, but do not link to other sites beyond that directory.

**Pre-Telecommunication Studies Majors:** Concepts and issues addressed in this course recur, so you should retain class notes. After completing this course, Tcom 1580 (Introduction) and English 1550 (Writing I) with grades of "C" or better in all three, then you may enroll in Tcom 2682 (Scriptwriting) and/or Tcom 2683 (Operations and Performance). Do not take advanced courses without having first completed their prerequisites: prerequisite courses taken out of order will not count toward your degree. Don’t forget, you’re required to establish and maintain an overall GPA of at least 3.0 in 30 or more contiguous semester hours to enter/continue in the TCom program. This is a specific requirement, and you should be careful to understand it!

**Purposes of the Course.** Anyone who claims to have developed expertise in the media knows the basics of how the media work. That’s why you should think of this course as an introduction to media technology for the non-engineering professional. It doesn’t matter that you might see yourself in the future as a sales executive or a lawyer or a teacher - knowing about the media means knowing about the technology. Actually, because each of our lives is affected directly by these technologies, you owe it to yourself to understand them.

We assume you have done satisfactory work in high school algebra and physics, and that you remember the general principles (although perhaps not the math!).

We aim first to review the basic principles of electricity and magnetism as they relate to electronic media. We will consider how they are produced, how they are manifest in electrical circuits, how they are used in everyday applications and, most importantly, how they are used in communication electronics. **Second,** we will review the technologies and technology systems -- as categories, such as "microphones" -- now in use in the electronic media industries. Our third aim is to enable you to study the key pieces of equipment which are normally found in a communication system, whether audio/radio, video/television, or
computer/network -- such as the EV-635A microphone. This information will come mainly from product user manuals and manufacturer’s websites as well as from hands-on study of the equipment itself.

Excluded from the course will be formal study of studio operations and the production process. The idea is to get you ready to learn how to use the gear in Tcom 2683. We will explore what the technologies are as well as how and why they work. But ... you are invited to join the production team of Homework Express! That’s the hands-on companion to production courses. You should find that understanding the technologies which you will later command will expand your knowledge, test your learning skill, and enhance your capacity to function in this discipline.

Of course, you can - and should! - volunteer to help out in the audio labs, in the TV Studio, or at any local radio or TV station. The opportunities for hands-on experience with technology are everywhere, and they await your initiative.

Electronic Library. We might collect technology-related documents and format them into a “Telecom Technology Handbook,” depending on how your learning progresses. Early in the term we would agree to a table of contents and how to avoid copyright infractions. Then we would formulate a strategy for assigning topics to people and for collecting the whole set of files. For example, we might scan a 2-page diagram and description of a power supply or distribution amplifier. Or, we could do a photo album of file servers or radio transmitters. Grading would normally assess group accomplishment as well as individual contributions.

Course Enrollment. The good news is we’re preparing lots of students to get involved in YSU Television Productions - and to develop their academic major. The bad news is more than 40 people have signed up for this course. Without teaching assistants and multiple labs, it’s not possible to divide the class into teams. The other possibility is to treat the course as a lecture-based one, which involves me talking a lot and you looking at the projector screen a lot. Even that will be difficult because I don’t know where 40+ people would sit. I’ll try to compromise and make everyone equally happy - which probably means equally miserable. :)

Grading. Course content divides up nicely into fourths:

- Exam #1 (Overview, Signals, Audio, Radio) 25% or 33%
- Exam #2 (Data, Video, TV, ) 25% or 33%
- Exam #3 (Cluster Applications) 25% or 33%
- Tcom Tech Handbook (group & individual) 25% or 0%

Exam items will probably be “objective” format (such as multiple-choice). A constant (k) will be added to all scores initially above 50%, producing at least one high A, within reason. “Attendance and participation” will be relatively less important in terms of final grades. [Historically, doing well is positively correlated to class attendance, and doing poorly is negatively correlated to class attendance.] We use the “adult-centered” learning model, in which it’s up to you to manage your progress.

Missed Exams, Assignments. It’s up to you to manage your progress. That means if there’s something you don’t understand, it’s up to you to get it cleared up. You should take
the initiative. You're also responsible for taking exams and turning in assignments. If something bad happens – which is beyond your personal control – and you miss an exam or assignment, relief might be extended. But you must demonstrate that the problem was beyond your realistic influence, such as a house fire, medical emergency, or automobile accident. These don't cut it: went hunting, went on vacation, went for a job interview, had to work, was too drunk, thought girlfriend was pregnant, couldn’t open the garage door, thought I was pregnant, afraid of snow, overslept.

Email names/subject. Put “TCOM 1581” in the subject line of all email. Any email without this phrase in the subject line will be treated as virus-infected spam and deleted immediately. It’s up to you to make sure you are receiving and reading email; if I am slow in responding to a change-of-address, pester me.

Miscellaneous: I might attend several conferences and assorted meetings during the term. Alternate arrangements will be made and announced in class or by email, if necessary.

We will not meet if YSU classes are officially canceled. Nor will we meet if Ursuline High School is closed (but not “delayed”) because of weather conditions (Email me immediately for clarification). Unless ... the scheduled activity cannot be made up, such as a final exam. Spend time thus liberated on your “Telecom Technology Handbook” or preparing for exams.

Introduce yourself to the people seated nearby. Exchange phone numbers. You should be able to contact a couple of classmates in case of unforeseen circumstances.

Much class information will be displayed by computer projector. Lines of text are difficult to read, so pick a seat that allows you to see clearly. Although YSU’s classroom technology is supposed to be of recent design and in good repair, sometimes it does not get delivered or it does not work. We must cope.

The last exam (Exam #3) might occur on the last regular class day of the term (Wed, December 2) – if the class is ready for it. In past semesters, the class has opted not to have an “Exam #3,” but rather to have a “comprehensive final exam” during the normally scheduled final exam period (Monday, May 3, 1-3PM - VERIFY !!). Specifics will be explained in class.