

# UED 502

## *Integrating the Use of the Internet Across the K-12 Curriculum*

**Instructor: Tom Spencer**

547-0134

tspencer@whro.net

**Office Hours: Arranged by appointment.**

### **Introduction:**

The world that we live in is currently undergoing a fundamental shift in the way that we use and manage information. The Internet, formerly the domain of scientists, technical professionals, and graduate students has become part of the common language of everyday life. It is increasingly the "tool" of choice for those who desire access to information on a wide array of topics through varied media. Everyone from homemakers to business people are "getting connected." We owe it to ourselves as educated individuals to become aware of the resources at our disposal so that we might make wise choices about their use and value to our lives. This course is designed to acquaint us with the relevant terminology and enable us to analyze the tools that we are afforded by this new technology.

### **Course Description:**

Lecture 3 hours; 3 credits. The course will consist of an introduction to computer networking, the suite of telecommunications utilities, browsers, and resources that can be found on the Internet. The course will focus on the resources available through Norfolk State University and other resources that may be accessed via a commercial (ISP) Internet Service Provider. Students will become acquainted with the tools available by searching for information on-line, demonstrating the use of each of these tools, and producing a homepage that can be uploaded to a server on the World Wide Web. Students will learn to employ search techniques to locate information that will assist them in their study of the Internet and its resources.

**Prerequisite:** Graduate standing.

**Course Objectives:** Upon completion of this course students will be able to:

1. Compose, send, and manage e-mail.
2. Access and navigate newsgroups.
3. Access remote computers and utilize their resources using telnet.
4. Navigate Unix directories.
5. Discuss information available using the WWW.

6. Identify, research, and be able to make intelligent information-based choices when selecting an (ISP) Internet Service Provider.
7. Define relevant terminology associated with telecommunications and the Internet.
8. Describe the system requirements needed to access Internet resources at various levels.
9. Retrieve and place files on the Internet using (FTP) File Transfer Protocol.
10. Design a Web page using (HTML) HyperText Markup Language that can be uploaded to a host computer on the WWW.
11. Use appropriate search techniques to locate information on specific topics on the WWW and on FTP sites.

### **Course Requirements/Assignments:**

- On-line Journal of your experiences surfing the Internet. This journal should be a record of your time spent sending/checking your e-mail (Hotmail), getting archie to locate programs for you, FTPing those programs back for your use, searching for things on the Web with search engines and indexes, what you are finding on the Web (bookmark your search results and the sites that you visit that meet your approval). I would like to know what you were initially trying to locate / do, and subsequently find out if you were successful / unsuccessful or if you found something totally unrelated, but infinitely better. Please feel free to log any problems that you are experiencing with the exact messages that appear on the screen so that we might be able to do some troubleshooting when you come to class. I will provide a list of sites that I think may be useful to you in your travels at <http://members.whro.net/~tspencer/training>. I would like to see these appear in your on-line journal along with at least as many entries for web sites that you find on your own.
- Telecommunications assignments performed in class and participation in class lectures and discussions
- Multimedia presentation: Build a presentation using a collection of the applications that we have studied above. Edit the presentation. Present on a topic where you would use a computer lab to teach the lesson to the students. Include the instructional strategies that you would employ to manage instruction in that environment. Facilitate a discussion regarding any ethical or legal concerns that might need to be addressed as a result of this instructional unit. Compare and contrast the presentation of this same lesson in an environment where only one compute is available in a traditional classroom setting. Prepare formal lesson plans to cover one week of instruction. You should utilize the applications and technologies that we have studied in this course to prepare the lesson plans. You should integrate a variety of the technologies that we have studied into these lesson plans for the benefit of the students to be served. Develop one of these lesson plans into the Multimedia presentation that is mentioned above and be prepared to present it to this class as if we were your students. You will need to prepare instructional materials to hand out to the class, so that we may effectively participate in the lesson.
- HTML/Web page design: I ask that you design a Web page that will present some curriculum - related information that you believe would be effectively displayed on the WWW. Please see the following URL: <http://members.whro.net/~tspencer/training/htmlassign.html>
- Culminating paper: I would like to know how you plan to use the tools that we have analyzed in the past weeks. Will you use them personally, in your profession, or both? Do you feel that the availability and your expertise with these tools will effect the way in which you work and communicate? Will your methods of instruction be impacted by the use of these technologies, and if so do you imagine that student performance will be impacted also? Give all of these questions careful consideration and respond with approximately two pages of text to each.

**Note:** All assignments are to be turned in on the date specified. Students **may not** assume that assignments will be accepted if turned in late. Assignments are to be typed, double-spaced twelve point in the Times New Roman

font with one-inch margins. Please turn assignments in without report covers or binders. A cover page stapled to the assignment at the top left - hand corner of the paper will suffice.

**Grading:**

Mid-term 20%

On-line Journal 15%

Class / homework assignments, class lecture and discussion participation 30%

Curriculum – Related Lesson Presentation 10%

Web page 10%

Culminating paper 15% (In lieu of a final examination)

**Special Needs Students:** Students with declared special needs will be accommodated as per University policy. Please meet with the instructor to discuss potential accommodations.

**Attendance Policy:** Students will be expected to attend all class sessions. If you must be absent from a class session, contact the instructor **prior** to the absence. Performance-based class assignments and lecture/discussion participation cannot be made up.

**Required Text:** Internet Bible, Underdahl, B. and Willett, E. (1998) IDG Books Worldwide, Inc., California. ISBN --7645-3216-2

**Optional Texts:** You may choose to use additional resources that can be located at libraries, bookstores, or on the Internet itself. If you find one that may be useful to the class at large, please share that information in class.

**Required materials/accounts:** A box of high-density 3.5" floppy diskettes. An account through an ISP **or** significant time spent accessing the Internet in a University operated computer lab. (See lab for schedule)

**Suggested outline of class topics:** Please see attachment.

**Grading Scale:** The following one-hundred point scale will be used to compute your exam grade:

100 - 95 A

94 - 86 B

85 - 78 C

77 - 0 F

A four point scale will be applied to all other assignments as follows:

4.0 - 3.6 A

3.5 – 2.6 B

2.5 – 1.6 C

1.5 – 0 F

Grades of + or - will be given at the discretion of the instructor.

**Note:** A grade of "I" indicates assigned work yet to be completed in a given course or absence from the final examination, and is assigned only upon prior instructor approval of a student request. The "I" grade can be given only in exceptional circumstances beyond the student's control, such as illness. In these cases it is the responsibility of the student to notify the faculty member.

**Note:** Due to specific interests and needs of class members, as well as the response of the network (both local and Internet) it will be necessary to maintain a high degree of flexibility with this suggested schedule. We may need to change topics or modes of instruction on or during any given class day.

Please visit the following sites:

<http://members.whro.net/~tspencer/training> Main page for this class

<http://members.whro.net/~tspencer> Main page for entire site

<http://members.whro.net/~tspencer/bookmarks> Famous former student's bookmarks

<http://members.whro.net/~tspencer/training/tech-sols.html> Virginia Technology SOL

<http://members.whro.net/~tspencer/training/techstan.html> Enabling skills to allow teachers to help students meet the SOL.