SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY SAULT STE. MARIE, ON



COURSE OUTLINE

| Course Title: | MULTIMEDI | A COMPUTER APP | PLICATIONS | | |
|--|----------------------------------|-----------------|----------------|--|--|
| Code No.: | CSA110 | Semester: | ANY | | |
| Program: | General Arts and Science Program | | | | |
| Author: | FRANK TUR | CO Edited by: | Dennis Ochoski | | |
| Date: January 2002 Previous Outline Date: Sept. 2001 | | | | | |
| Approved: | | | | | |
| Appioveu. | | | | | |
| | Dean | | Date | | |
| Total Credits | | | Date | | |
| – | s: 3 | 22 or EQUIVALEN | | | |
| Total Credits | : 3 EDP1 | | | | |

COURSE DESCRIPTION :

This course will develop an in depth understanding of the various aspects that make up a multimedia computer. Students will build on the computer concepts that were covered in previous computer courses. The student will work in depth in everything from running programs to managing files and disks using Windows Explorer, creating short cuts, using accessories as well as OLE.

This course will also focus on the DOS operating environment and point out why it is important for students to have a basic understanding of DOS. Students will learn basic DOS commands and file structures. Students will then be able to compare and evaluate the DOS and Windows 95 environments.

Students will use their previous e-mail experience to be able to adapt to one or more additional e-mail packages.

Students will use the Internet to research and acquire material on various topics that pertain to the course. Students will understand file compression and learn how to download and unzip files.

Modern computer applications now include audio, images, graphics and video as well as text based information. Students will understand and use the different multimedia file types to create a basic Web based multimedia presentation. Students will also be exposed to a variety of the necessary hardware / software tools used in preparation of multimedia files such as scanners, video capturing, sound recording. The students will use the files that they have either created or acquired to develop a personal web page.

II. LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE:

(Generic Skills Learning Outcomes placement on the course outline will be determined and communicated at a later date)

LEARNING OUTCOMES

- 1. Demonstrate an understanding of the various components that make up a Multimedia computer system.
- 2. Apply knowledge of DOS fundamentals and commands.
- 3. Apply knowledge of the Windows 95 interface.
- 4. Use the Internet to research related course material information and download necessary information.
- 5. Demonstrate the ability to move from a known e-mail package to another and compare their different features.
- 6. Work with the various data compression techniques and standards for sound, images and video.
- 7. Develop a simple Internet Web page using a variety of multimedia design techniques and features.

LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE:

Upon successful completion of this course, the student will:

1) Demonstrate an understanding of the various components that make up a multimedia computer system.

Potential Elements of Performance:

- Differentiate the Computer Software and hardware components
- Describe the components of a computer system as related to multimedia
- Define the function of the basic and auxiliary components of the computer system
- Analyze the flow of information within the computer system
- Describe a typical memory configuration within a multimedia system.
- Analyze the use of additional auxiliary devices such as scanners and zip drives and how they effect multimedia presentations
- Know what to look for in purchasing a computer system

II LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE (Continued):

2.) Apply knowledge of DOS fundamentals and commands

Potential elements of the performance

- Demonstrate an understanding of DOS basics and functionality
- Use and understand file handing and disk management
- Understand and work with directory tree structure
- List files and use wild cards
- Change disk drives
- Copy and backup files
- Understand directory structure
- Use DOS commands to manage directories, files and run programs
- Demonstrate and use the DOS editor

3.) Apply knowledge of the Windows 95 Interface

Potential elements of the performance

- Review the Windows 95 environment
- Activate and switch between windows
- Resize and move windows
- Transfer information between windows
- Describe the Windows 95 desktop and configuration
- Run a number of programs at the same time
- Describe the different methods in which programs can be run
- Customize the windows desktop
- Create and organize folders
- View disk contents and files
- Use Windows Explorer to manage files, move copy, rename, delete
- Understand how to use the Control Panel and Task bar to control the environment
- Use the recycle bin
- Use the right mouse button and create short cuts
- Use the Windows 95 Accessories

4.) Use the Internet to research related course material information and download necessary information.

Potential elements of the performance

- Know what the Internet is and how it works
- Demonstrate an understanding of the Internet architecture and protocols
- Use the Internet to perform course related searches and downloads
- Work with Listservs and News Groups
- Use a graphics browser, Internet Explorer
- Use a variety of Internet tools FTP, TELNET, WINZIP
- Perform a variety of searches using popular search engines
- Understand the WWW client/server relationship
- Understand how to download and save files appropriately
- 5.) Demonstrate the ability to move from a known e-mail package to another and compare their different features.

Potential elements of the performance

- Know the basics of POP and SMTP protocol
- Configure e-mail (identity, username, password, etc)
- Send and receive mail c/w attachments.
- Open, view and save attachments
- Use proper e-mail etiquette
- 6.) Work with various data compression techniques and standards for sound, images and video.

Potential elements of the performance

- Describe data compression technologies, file types and standards relevant to multimedia applications.
- Investigate various image file formats such as jpeg, gif, tiff, pcx, etc..
- Investigate the advantages and disadvantages of various file formats as well as their conversion techniques.
- Investigate the use of sound files such as wave, midi, voc.
- Investigate a variety of video standards DVI, AVI and MPEG

II LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE (Continued):

7.) Develop a simple Internet Web page using a variety of multimedia design techniques and features.

Potential elements of the performance:

- Review basic HTML commands and a WEB page editor NETSCAPE
- Use a variety of new tools to enhance the WEB page effectiveness
- Produce a personal Internet Web Page using a variety of multimedia design techniques and features.

| III. <u>TOPICS</u> | WEEKS |
|---|-------|
| 1. COMPUTER COMPONENTS | 2 |
| 2. DOS FUNDAMENTALS | 2 |
| 3. WINDOWS 95 INTERFACE | 2 |
| 4. INTERNET RESEARCH | 2 |
| 4. INTERNET RESEARCH 5. USING EMAIL | 2 |
| 6. DATA and FILE COMPRESSION TECHNOLOGIES | 2 3 |
| | • |
| 7. WEB PAGE DEVELOPMENT | 3 |

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

TEXT: New Perspectives on the Internet and Computer Concepts with Win 95', Nelson Publishing 5 (1.44 Meg) 3 ¹/₂ inch floppy disks Online Help Internet Research Lecture Notes and Printed Handouts

V. EVALUATION PROCESS/GRADING SYSTEM

Tentative Breakdown*:

| The m | arks for this course will be arri | ved as follows: |
|---------|-----------------------------------|-----------------|
| Tests a | and Quizzes | |
| • | Computer Components | 10% |
| • | Windows95 / DOS | 10% |
| • | Internet and HTML | 10% |
| • | Data and File Compression | 10% |
| Lab A | ssignments | |
| • | DOS Fundamentals | 10% |
| • | E-mail | 10% |
| • | Windows95 | 5% |
| • | Data and File Compression | 10% |
| • | Web Page Design | 20% |
| • | Internet | 5% |

*Some Minor modifications to the above percentages may be necessary. The professor reserves the right to adjust the mark up or down 5% based on attendance, participation, leadership, and creativity and whether there is an improving trend.

ATTENDANCE:

- In order to remain up to date with the delivery of course material students will be required To do the following:
 - Be present for each class.
 - Report to class within 5 minutes of the scheduled start time.
 - Bring the required course text and resource materials.
 - Sign the class attendance book at the beginning of each class.
- Any student who is absent for 3 or more times without any valid reason or effort to resolve the problem will result in either of :
 - a) marks being deducted
 - b) his / her removal from the course.

ASSIGNMENTS

- All Assignments must be completed satisfactorily to complete the course.
- Assignments will not be accepted past the designated due date unless there are documented, legitimate circumstances.

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V. EVALUATION METHODS (Continued)

<u>TESTS</u>

- The professor reserves the right to adjust the number of tests, practical tests and quizzes. Students will be given prior notice to any changes.
- All course material (electronic lessons, classroom lectures, printed handouts etc...) are subject to evaluation and may be used in the creation of tests and quizzes. If not in class at the time of their delivery it will be the student's responsibility to obtain the information.
- Written tests will be conducted as deemed necessary; generally at the end of each block of work, and will be announced in advance.
- Quizzes may be conducted without advance warning.
- Students who are absent on the day of a test or quiz will be marked absent and given a failing grade for the evaluation.
- Students who provide a signed written statement that explains their absence (to the satisfaction of the course professor) will be granted a one time opportunity to write the missing test or quiz. This opportunity will be scheduled at the discretion of the course professor.

GRADING SCHEME

- A+ 90 100% Outstanding Achievement
- A 80 89% Excellent achievement
- B 70 79% Average Achievement
- C 60 69% Satisfactory Achievement
- U Incomplete: Course work not complete at Mid-term. (Only used at mid-term)
- R Repeat
- X A temporary grade that is limited to instances where special circumstances have prevented the student from completing objectives by the end of the semester. An X grade must be authorized by the Chairman. It reverts to an R if not upgraded in an agreed-upon time, less 120 days.

UPGRADE OF INCOMPLETE WORK

- When a student's course work is incomplete or below 55%, there is the possibility of upgrading to a pass when the student's performance warrants it. Attendance and assignment completion will have a bearing on whether upgrading will be allowed.
- The method of upgrading is at the discretion of the teacher and may consist of one or more of the following options:
 - o assigned make-up work
 - re-doing assignments
 - re-writing of tests
 - writing a comprehensive supplemental examination.

V. EVALUATION PROCESS/GRADING SYSTEM (Continued)

- A failing grade will remove the option of any upgrading and an R grade will result.
- Where a student's overall performance has been consistently Unsatisfactory, an R grade may be assigned without the option of make-up work.

VI <u>SPECIAL NOTES</u>

- 1. All students should be aware of the Special Needs Office in the College. If you have any special needs such as being visually impaired, hearing disabled, physically disabled, learning disabilities you are encouraged to discuss required accommodations confidentially with the Professor and/or contact our Special Needs office so that support services can be arranged for you.
- 2. Your professor reserves the right to modify the course as he/she deems necessary to meet the needs of students.
- **3.** It is the responsibility of the student to retain all course outlines for possible future use in gaining advanced standing at other post-secondary institutions.

4. <u>Plagiarism</u>

Students should refer to the definition of "academic dishonesty" in the "Statement of Student Rights and Responsibilities". Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor.

- 5. Substitute course information is available at the Registrar's office.
- 6. Students must achieve a passing grade in both the assignment and the test portions of the course.
- 7. The topics will not necessarily be covered in the order shown in the course outline.

VII. PRIOR LEARNING ASSESSMENT

Students who wish to apply for advanced credit in the course should consult the instructor.