COURSE OUTLINE

COURSE TITLE: **Multimedia Development**

CODE NO.:   **CSD312**   SEMESTER: **5**

PROGRAM: COMPUTER ENGINEERING TECHNOLOGY
COMPUTER PROGRAMMER ANALYST

AUTHOR: Fred Carella/Marcel VanLandeghem

DATE: Sep 1999   PREVIOUSLY DATED: Jan 1997

APPROVED: _____   _____
DEAN   **DATE**

Length of Course: **16 weeks**
Prerequisites: **Completion of the Computer**
Engineering Technician or
Computer Programmer Analyst
Program or approval of the Dean   Total Credit Hours: **48**

Multimedia Development   CSD312
_____   _____
COURSE NAME   **COURSE CODE**

I. COURSE DESCRIPTION:

This course develops a practical ability in the design and implementation of web pages ions taking into account hardware, software, media creation and file format issues.

In addition, concepts relating to presentation design, computer hardware requirements, media capture, file formats, media storage and presentation hardware will be developed and used in the creation of the presentations.

Development will occur using various HTML tools , (example HTML, Javascript, VBScript, etc…).

II. TOPICS TO BE COVERED:

1. Hardware requirements including the Multi Media PC specifications (MPC I, MPC II, MPC III)

2. File formats and compression techniques for still images, moving images and sound.

3. Multimedia development tools.

4. Internet based presentations using the World Wide Web.

5. Multimedia presentation design issues.

Multimedia Development   CSD312

_____   _____

COURSE NAME   **COURSE CODE**

III. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

A. Learning Outcomes

a)   Identify, compare and evaluate the hardware specifications outlined in the MPC specifications.

b)   Identify, compare and discuss the merits of various audio, video, still image capture hardware.

c)   Discuss the merits of various file formats, their compression and encoding schemes and apply the correct format in the right circumstance.

d)   Create web pages incorporating HTML, DHTML, Javascript and VBScript and other web technologies.

e)   Discuss multimedia design issues and implement presentations based on a design specification.

Multimedia Development   CSD312
_____   _____
COURSE NAME   **COURSE CODE**

B. Learning Outcomes and Elements of the Performance:

Upon successful completion of this course the student will demonstrate the ability to:

1. Identify, compare and evaluate the hardware specifications outlined in the MPC specifications.

Elements of the performance:

- understand, discuss and define the following
    - Multi Media PC specifications MPC I, MPC II and MPC III
    - CDA (Redbook), Compact Disc Mode 1 and Mode 2 (form 1 and form 2)
    - mixed mode and multisession media as well as CD-ROM, CD-ROM XA, Photo CD, CD Recordable (part II), Video CD, Enhanced Music CD (CD Extra) and CD-i discs
    - MPEG I, & II, .AVI
    - video capture hardware/software
    - audio capture hardware/software

2. Identify, compare and discuss the merits of various audio, video, still image capture hardware.

Elements of the performance:

- discuss and identify various media capture hardware and techniques
    - scanners
    - digital video cameras
    - video capture from camera/VCR
    - Sound Blaster and Video Blaster hardware
    - capture video, audio, still images and incorporate into presentations

Multimedia Development   CSD312
_____   _____
COURSE NAME   **COURSE CODE**

3. Discuss the merits of various file formats, their compression and encoding schemes and apply the correct format in the right circumstance.

    Elements of the performance:

    - understand, discuss, define and create files incorporating
        - PCM, ADPCM and other encoding techniques
        - .wav (Microsoft WAVE files, RIFF)
        - .ram Real Audio files
        - real video, quick time, MPEG movies, MP3 audio
        - jpeg, gif, png, tiff
        - LZW, RLE, jpeg, mpeg, compression

4. Create web pages incorporating HTML, DHTML, Javascript and VBScript and other web technologies
    - review and create HTML encoded web pages
    - discuss the merits of HTML
    - create Dynamic HTML pages
    - incorporate Javascript into a web page
    - incorporate VBScript into a web page
    - discuss web forms and CGI programs
    - write a cgi program.

5. Discuss multimedia design issues and implement presentations based on a design specification.
    - understand, discuss and perform the following design techniques, generate a design spec and create a multimedia presentation based the spec.
        - brainstorming
        - outlines
        - storyboards
        - scripts
        - building, testing , debugging.

Multimedia Development   CSD312
_____   _____
COURSE NAME   **COURSE CODE**

IV.   EVALUATION METHODS:

The mark for this course will be arrived at as follows:

  Tests:
        outcomes #1, #2, #3   10%
        outcomes #4, #5, #6   35%

  Assignments:
        outcomes #1, #2, #3   10%
        outcomes #4, #5, #6   45%
                Total   100%

Multimedia Development   CSD312

_____   _____
COURSE NAME   **COURSE CODE**

The following letter grades will be assigned in accordance with the School of Engineering Technology and the School of Business and Hospitality policies:

Course Grading Scheme

A+	90% - 100%	consistently outstanding achievement
A	80% - 89%	outstanding achievement
B	70% - 79%	consistently above average achievement
C	60% - 69%	satisfactory or acceptable achievement in all areas subject to assessment
R	less than 60%	repeat - the student has not achieved the objectives of the course and the course must be repeated
CR		Credit Exemption
S		satisfactory given at midterm only
U		unsatisfactory given at midterm only
X		a temporary grade

An 'X' grade is limited to instances where exceptional circumstances have prevented the student from completing objectives by the end of the semester. An "X" grade must be arranged before the deadline for grade submission and is granted at the discretion of the Professor. The 'X' grade must also have the Dean's approval and has a maximum time limit of 120 days.

Multimedia Development   CSD312

_____   **_____**
COURSE NAME   **COURSE CODE**

V.   SPECIAL NOTES

1.   In order to pass this course the student must obtain an overall **test** average of 60% or better, as well as, an overall **assignment** average of 60%.

2.   Assignments must be submitted by the due date according to the specifications of the instructor. Late assignments will normally be given a mark of zero. Late assignments will only be marked at the discretion of the instructor in cases where there were extenuating circumstances. Attendance in the lectures and labs is mandatory.

3.   The instructor reserves the right to modify the assessment process to meet any changing needs of the class. Consultation with the class will be done prior to any changes.

4.   The method of upgrading an incomplete grade is at the discretion of the instructor, and may consist of such things as make-up work, rewriting tests, and comprehensive examinations.

5.   Students with special needs (eg. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

6.   Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.

VI.   PRIOR LEARNING ASSESSMENT:

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

VII.   REQUIRED STUDENT RESOURCES

Internet resources. Instructor handouts