COURSE DESCRIPTION:
This is an introduction course in digital signal processing, the fundamental elements of digital audio signal processing, such as sinusoids, spectra, the Discrete Fourier Transform (DFT), digital filters, transforms, transfer-function analysis, and basic Fourier analysis in the discrete-time case. The labs focus on practical applications of the theory, with emphasis on working with waveforms and spectra.
This course will teach students to produce live webcasts (capturing and transmission of live courses) in Windows Media, Real Media, QuickTime and MPEG formats as well as convert traditional video to almost any digital format including CD-ROM and DVD and publish sound files to the web.

PREREQUISITES: NONE

EXPECTED COMPETENCIES:
Upon completion of this course, the student will be familiar with:
1. Demonstrate skills in the area of audio production and editing.
2. Demonstrate an ability to think, critique and problem solve in a creative manner.
3. Demonstrate knowledge and an understanding of the audio clues and language used in film/video production.
4. Understand the components of audio development and creation and be able to identify the elements (dialogue, music, effects, motifs, etc.) utilized for their creation.

ASSESSMENT METHODS:
Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:
90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E