Raritan Valley Community College
Course Outline

ARTS 113: Audio Production

I. Basic Course Information

A. Course number and Title: **ARTS 113**: **Audio Production**

B. New or Modified Course: **New**

C. Date of Proposal: Semester: **Fall** Year: 2009

D. Sponsoring Department: **Visual and Performing Arts**

E. Semester Credit Hours: **3**

F. Weekly Contact Hours: **4** Lecture **2**
Lab **2**

G. Prerequisites/Corequisites: **none**

H. Laboratory Fees: **yes**

I. Name and Telephone Number or E-Mail Address of Department Chair:
Ann Tsubota—atsubota@raritanval.edu

II. Catalog Description

This course introduces students to the fundamentals of multi-track audio production. Students will explore recording techniques, including the choice of microphones and their placement, as well as mixing multi-track audio utilizing equalization, compression, reverb, and panning. With an emphasis on acoustics and the physics of sound, class projects will focus on producing audio for music distribution, radio, computer gaming, and film.

III. Statement of Course Need

This course develops basic audio skills utilized across media. These tools are essential in film, music production, game design, and web video.

IV. Place of Course in College Curriculum
   A. Free Elective
   B. This course meets a specialization elective for the A.A.S. Multimedia Communications and A.S. Digital Media/Film Studies. It is also a Visual & Performing Arts elective for the

A.F.A. Music.
C. Course transferability: Although this course has not yet been posted for transfer evaluation by njtransfer.org website, Audio Production will most likely transfer to most four-year Universities as an elective in the Arts or as a free elective.

V. Outline of Course Content

A. Introduction to acoustics
  1. Frequency
  2. Amplitude
  3. Wavelength
B. Digital audio
  1. Sampling Rate
  2. Bit Depth
  3. Nyquist theorem
C. Microphones
  1. Mic elements (condenser, dynamic, ribbon)
  2. Pick-up patterns
  3. Special purpose microphones
  4. Phantom power
  5. Mic accessories
D. Recording
  1. Studio vs. field recording
  2. Concerns for film, music, and radio
E. Mixing
  1. Equalization
  2. Compression
  3. Reverb
  4. Outboard effects
  5. Correcting errors made during recording
F. Mastering
  1. Preparing audio for various media

VI. Educational Goals and Learning Outcomes

A. <u>Educational Goals</u>
Students will:
1. utilize industry-standard audio software and hardware (GE-RVCC 3; NJ 4)
2. create complex spatialized multi-track recordings (GE-RVCC 1,2,3; NJ 4)
3. produce mixed audio content for film, music, web, and radio (GE-RVCC 1, 3; NJ 4, 6)
4. increase their ability to analyze what they are hearing (NJ 6)
5. critique one's own work and classmates' work using critical analysis and constructive comments. (GE-RVCC 2; NJ 1,6)

B. <u>Learning Outcomes</u>
Upon completion of this course, the student will be able to:
1. list key principles and techniques used in audio production.
2. choose the correct microphone for a recording situation

3. apply acoustic theory while setting up a session in order to create an optimal recording
4. mix a multi-track recording using industry standard software for a variety of media
5. create audio CDs, MP3s, DVD-audio, and audio for video

VII. Modes of Teaching and Learning
A. Lecture/discussion
B. Listening sessions
C. Readings
D. Tutorials
E. Group projects
F. Studio work time
G. Class critiques

VIII. Papers, Examinations, and other Assessment Instruments
A. Recording projects
B. Written Essays/Responses
C. Exercises
D. Exams
E. Quizzes
F. Discussions
G. Critiques

IX. Grade Determinants
A. Recording projects
B. Written Essays/Responses
C. Quizzes
D. Critiques
E. Studio Participation

X. Text and Materials
Suggested Textbook: Alten, Stanley. *Audio in Media (8th edition).* Wadsworth Publishing. 2007
Information is disseminated through the following means:
A. Web sites
B. Tutorials
C. Readings
D. College web portal

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

XI. Resources
A. Computer stations with current sound-editing software, in a studio such as A09B
B. One computer with multi-track recording hardware
C. Microphones
D. Portable audio recorder
E. Recording accessories (mic stands, cables, pop filters, etc.)