SOUND PRODUCTION FOR MEDIA
VPT 2310

Class Hours: 0.0  Credit Hours: 3.0
Laboratory Hours: 4.0  Date Revised: Fall 2001

Catalog Course Description:
An introduction to basic audio production equipment and processes. Analog and digital systems will
be used to record, mix, and reproduce a variety of aural media. Emphasis will be placed on recording
on location and in the studio, mixing and effects, and processing multiple sound tracks for use in
film, television/video, and multimedia environments.

Entry Level Standards:
Must be able to read and write at the college level.

Prerequisites:
None

Textbook(s) and Other Reference Materials Basic to the Course:
Stanley R. Alten, Audio in Media

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sound Design</td>
</tr>
<tr>
<td>2</td>
<td>Sound and Hearing</td>
</tr>
<tr>
<td>3</td>
<td>Acoustics and Psychoacoustics</td>
</tr>
<tr>
<td>4</td>
<td>Sound Studios</td>
</tr>
<tr>
<td>5</td>
<td>Microphones</td>
</tr>
<tr>
<td>6</td>
<td>Mixing Consoles</td>
</tr>
<tr>
<td>7</td>
<td>Analog Recording</td>
</tr>
<tr>
<td>8</td>
<td>Digital Recording</td>
</tr>
<tr>
<td>9</td>
<td>Signal Processing</td>
</tr>
<tr>
<td>10</td>
<td>Loudspeakers and Monitoring</td>
</tr>
</tbody>
</table>
Producing Speech, Sound Effects and Music

On-Location Recording and Production

Editing

Creating the Sound "Picture"

Mixing and Rerecording and Layback to Video

Final Exam

II. Course Objectives*:

A. Demonstrate ability to set up and operate equipment commonly used for audio recording, playback, processing, and editing. I, IV

B. Exhibit appropriate responsibility in the care and handing of equipment, facilities, and other physical resources. II, V

C. Employ industry established pre-production, production, and post-production control procedures. I, II

D. Employ industry standard procedures, practices and test equipment required to maintain consistent and acceptable audio signal quality. I, II, IV

E. Develop a basic understanding of how to record, process, and edit audio signals employing techniques established in the industry to create compelling aural presentations or accompaniment for visual programs. I, II, IV

*Roman numerals after course objectives reference goals of the VPT program.

III. Instructional Processes*:

Students will:

1. Use appropriate technology to function within the discipline. Technological Literacy Outcome

2. Use critical thinking skills to interpret, evaluate, and make informed judgments. Problem Solving and Decision Making Outcome

3. Apply established industry safety practices and procedures. Personal Development Outcome, Transitional Strategy

4. Use industry recognized criteria for organizing audio and visual media to elicit predetermined responses in users. Communication Outcome

5. Employ standard physical and esthetic conventions. Information Literacy Outcome

6. Demonstrate understanding at signal flow and quality control. Technological Literacy Outcome

7. Differentiate between analog and digital technology and processes. Technological Literacy Outcome

8. Explain and employ physics at audio generation, acoustics and transmission. Technological
*Literacy Outcome, Active Learning Strategy*

*Strategies and outcomes listed after instructional processes reference Pellissippi State’s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.*

**IV. Expectations for Student Performance***:

Upon successful completion of this course, the student should be able to:

1. Demonstrate understanding of and employ established procedures for responsible care, handling, and use of all equipment. C
2. Observe and employ correct procedures for checking our equipment. This includes both VPT equipment and that which is NOT normally part of the VPT program. B
3. Understand the basics of sound transmission, hearing, and acoustics and apply that in their work. H
4. Perform basic audio recording on both analog and digital devices (video decks as well as audio only recorders). Skills will include tone calibration, level setting, and tape handling. Technical topics covered will include the recording mechanism transport components, and tape formations. F
5. Identify and properly handle the many signal formats and interconnections being used in the industry. A
6. Identify, understand, and properly use the many types of industry standard microphones and mic accessories available. This includes stereo and multiple miking techniques. A
7. Employ proper microphone boom technique in recording audio for video. A
8. Understand audio mixing basics (the concepts of gain structure and signal flow), and apply that knowledge with both small location mixers as well as large multi-channel studio consoles. F
9. Identify, understand and properly use the many standard signal-processing devices. This includes but is not limited to compressors, equalizers, reverberators, delay lines, limiters, and noise gates. A
10. Perform basic editing functions with both analog and digital devices. G
11. Understand the techniques used in multitrack audio production. This includes the standard music production process of tracking, overdubbing, and mixing. E
12. Understand the techniques used in live audio presentations. Concepts include stage monitoring, feedback control, and live music production. E
13. Complete basic maintenance tasks such as cable construction, tape head cleaning and demagnetizing, and simple equipment troubleshooting. E
14. Understand the basics of digital audio. This includes the subjects of sample rate conversion and PC based (or proprietary) digital audio workstations, DAW. G
15. Perform the basic tasks involved in audio sweetening for video. Concepts include machine synchronization, automated mixing, and multi-channel encoding. F
16. Use standard and individually developed techniques to construct creative, compelling, and technically consistent audio programs.

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures: 60% of grade
   - Quizzes 30%
   - Midterm and Final Exams 30%

B. Laboratory Expectations:
   - N/A

C. Field Work:
   - N/A

D. Other Evaluation Methods: 40% of grade
   - In-class participation and attendance 20%
   - Projects 20%

E. Grading Scale:

   Grading procedures and percentage values may be modified from this description by your instructor. Please ask for verification if you have any questions regarding how your grade will be determined.

   - 90 – 100 A
   - 80 – 89 B
   - 70 – 79 C
   - 60 – 69 D
   - below 60 F

VI. Policies:

A. Attendance Policy:

   Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course (Pellissippi State Catalog). Individual departments/programs/disciplines, with the approval of the vice president of Academic and Student Affairs, may have requirements that are more stringent.

   The VPT program believes a more stringent requirement is realistic because of the contractual commitment made by the College with local area employers. Therefore, to successfully complete VPT courses, students must attend at least 85% of classes.

   To be considered “in attendance,” students are expected to be in class at the scheduled starting time for that class. Students will be considered “tardy” from that time until 10 minutes after the scheduled starting time. Three such “tardies” shall constitute an “absence.” Students arriving any time after 10 minutes beyond the scheduled starting time for a class will be considered “absent.”

B. Academic Dishonesty:
In keeping with college-wide policies, the student is expected to adhere to the general rules and regulations relevant to academic and classroom misconduct as outlined in the catalog.

C. Other Policies:

Use of Equipment: Any act of misuse, vandalism, malicious or unwarranted damage or destruction, defacing, disfiguring, or unauthorized use of property/equipment belonging to Pellissippi State is subject to disciplinary sanction.