Class Hours: 3.0  Credit Hours: 3.0
Laboratory Hours: 3.0  Revised: Fall 2013

Catalog Course Description:

Control surfaces, high-resolution audio, advanced processing capabilities, code comparisons, extensive microphone techniques, synchronization, cutting-edge immersive recording and mixing techniques. The application of all these processes and current practice are examined and experienced. Preparation of advanced-format deliverables to industry standards and requirements will be covered; projects utilizing these points will be produced by the student.

Entry Level Standards:

Good working knowledge of basic audio principles and equipment; an active interest in current recording techniques - including reading of industry literature; musical background a plus but not required.

Prerequisites:

VPT 1015 or instructor approval. RATS 1400

Textbook(s) and Other Course Materials:

Text(s) will be provided by the instructor. Professional headphones (ATH-M50, Sony 7506); USB2 or Firewire external powered hard drive (at least 250GB) in Macintosh format.

I. Week/Unit/Topic Basis:

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<th>Week</th>
<th>Topic</th>
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<tr>
<td>1</td>
<td>Review of Recording Techniques I issues; refresher; review of the course goals.</td>
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| 2    | Work on assignment – 1- Mix a provided multi-track project, entire class time.  
2- Advanced microphone techniques: stereo, Decca, dual MS, Soundfield. |
| 3    | 1- Microphone applied techniques  
2- Recording session |
| 4    | 1- Building Surround Mixes – structural and temporal architecture in spectrum and dynamics.  
2- Building Surround Mixes - aesthetic issues and skill set presented; TEST #1 |
| 5    | Work on assignment – 1- Mix a provided multi-track project  
2- Continue and finish mix. Critiques. |
| 6    | 1- Control surfaces; hybrid systems; “front-end” analog systems; the myth of warmth. |
2- Fully manual analog systems

7 Control surfaces, hands-on assignments

8 Advanced audio processing; high-resolution audio for archiving, exceptionally demanding audio sources; future-proofing. TEST #2

9 Codec (compression/decompression) comparisons & underlying principles, mathematics

10 Advanced microphone techniques applications and mixing; Blumlein’s vision of stereo; rotation matrix; stereo imaging and Shuffling

11 Work on assignment: Record large-scale project as collaborative exercise Individual mixing of recorded project

12 Critiques of Mixes: large-scale projects with group observations and problem solving TEST #3

13 ISDN, Source Connect, and other distance recording techniques; Synchronization. Immersive recording and mixing techniques; latest developments.

14 Juried hands-on equipment examination. Juried mix reviews.

15 Final Exam - written and hands-on problem solving hardware examination

II. Course Goals*:

The course will

A. Enhance the student’s applied knowledge in advanced recording technology scenarios. (II, IV)

B. Guide students to be self-reliant in selection of materials and resources to complete a job or task in audio recording. (I, III, IV)

C. Expand student ability to mix recordings for multiple deliverables; examine and use distance-recording technologies. (IV, VI)

D. Guide students to greater confidence in complex projects with hard stop deadlines. (V)

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

III. Expected Student Learning Outcomes*:

Students will be able to:

1. Duplicate best practices when recording a live event, using proper microphone selection, advanced microphone techniques, microphone placement, and all aspects of a proper recording. (A)

2. Employ encoding techniques in development of deliverables for multiple format distribution. (B, C)

3. Evaluate unknown equipment; quickly move to usability of such equipment; research complex implementation issues in pro audio for rapid response for clients. (D)

4. Practice and master industry standards in deliverables; learn to critique their own work.
* Capital letters after Expected Student Learning Outcomes reference the course goals listed above.

IV. Evaluation:

A. Testing Procedures: **20%**

Three tests throughout semester plus Final Exam – may have hardware and hands-on components in testing. Students will satisfactorily complete all tests on the assigned readings and will satisfactorily complete the required audio projects as assigned.

B. Laboratory Expectations: **70%**

Projects are assigned throughout the course and instructions will be given in class. A significant portion of the final grade is determined by the student’s successful completion of these projects.

C. Field Work:

N/A

D. Other Evaluation Methods: **10%**

Students will be required to demonstrate, on demand, specific skills and procedures of the course upon request of the instructor.

E. Grading Scale:

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

V. Policies:

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of Academic Affairs, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Academic Affairs.

B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to the following practices:

- Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments.
• Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source.
• Purchasing or otherwise obtaining prewritten essays, research papers, or materials prepared by another person or agency that sells term papers or other academic materials to be presented as one’s own work.
• Taking an exam for another student.
• Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor.
• Any of the above occurring within the Web or distance learning environment.

Please see the Pellissippi State Policies and Procedures Manual, Policy 04:02:00 Academic/Classroom Conduct and Disciplinary Sanctions for the complete policy.

C. Accommodations for disabilities:

Students that need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by sending email to disabilityservices@pstcc.edu, or visiting Goins 127, 132, 134, 135, 131. More information is available at http://www.pstcc.edu/sswd/.

D. Other Policies:

PLEASE SUPPRESS THE URGE TO MULTI-TASK during class. Using a laptop for note taking purposes is fine, but please save YouTube searches, Facebook updates, tweets, or extended sessions of Minecraft for after class. As far as phones are concerned, you can keep them on, but set them to silent. There should be no reason to be using your phone during class.