

# **Master Course Syllabus**

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: Spring Year: 2025

Course Prefix: DAPR Course and Section #: 2550-001

Course Title: Audio Hardware Basics Credits: 3

### Course Description

Course Attributes

This course provides an in-depth look at wiring, cabling, and signal routing in modern recording studios. Students engage in both theoretical learning and hands-on projects, culminating in a final theoretical wiring project for the LC311. Includes signal flow principles, soldering techniques, cable assembly, and real-world applications of audio hardware..

This course has the following attributes:
☐ General Education Requirements
☐ Global/Intercultural Graduation Requirements
☐ Writing Enriched Graduation Requirements
☐ Discipline Core Requirements in Program
☐ Elective Core Requirements in Program

☐ Open Elective

Other: Click here to enter text.

# **Instructor Information**

**Instructor Name:** Bryan Sansom

# **Student Learning Outcomes**

By the end of the course, students will:

- 1. Understand and apply signal routing techniques in recording studios.
- 2. Identify and configure various cables, connectors, and related hardware.
- 3. Master soldering skills to assemble and repair audio cables.
- 4. Demonstrate effective problem-solving for troubleshooting signal flow issues.
- 5. Design and document a wiring project, showcasing professional practices.

### Course Materials and Texts

- Required Textbook: No textbook is required.
- Required Equipment:
  - o Radial Engineering EDU DI (available at the UVU Bookstore)
  - Safety glasses for soldering
- Additional learning materials provided via Canvas and YouTube.

**Technology Tools:** Students must download the Canvas and Microsoft Teams apps for reliable communication and enable notifications. Regularly check Canvas for course updates and assignments.

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### Course Requirements

#### Course Assignments, Assessments, and Grading Policy

By the end of the semester, students will:

#### 1. Course Assignments:

- Hands-On Projects: Practical exercises, including soldering, cable assembly, and signal routing troubleshooting (30%).
- **Homework:** Weekly assignments based on lecture topics (20%).
- Exams: Midterm and final exams covering theoretical and applied knowledge (30%).
- o **Final Project:** Comprehensive wiring mock-up for the LC311 studio setup (20%).

#### **Required or Recommended Reading Assignments**

See Canvas

### General Description of the Subject Matter of Each Lecture or Discussion

1: Course Introduction; Overview of Studio Signal Flow

Week 2: Cables and Connectors: XLR, TRS, TS, and RCA

Week 3: Soldering Basics and Safety Practices

Week 4: Assembly of Custom Audio Cables

Week 5: Signal Routing: Inserts, Aux Sends, and Patch Bays

Week 6: Signal Flow Problem Solving and Troubleshooting

Week 7: Project Introduction: LC311 Studio Wiring

Week 8: Midterm Exam

Week 9-11: Project Work and Real-World Applications (Site Visit to Maag Audio)

Week 12: Final Project Completion

Week 13: Review and Presentation of Projects

Week 14: Final Exam

### Required Course Syllabus Statements

#### **Generative AI**

Generative AI tools (e.g., ChatGPT, Google Bard) are permitted for the following activities:

- Brainstorming and refining ideas
- Fine-tuning research questions
- Finding information
- Drafting outlines
- Checking grammar and style

#### **Using Remote Testing Software**

☑ This course does not use remote testing software.

☐ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

# Required University Syllabus Statements

### **Accommodations/Students with Disabilities**

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU <u>Accessibility Services</u> at <u>accessibilityservices@uvu.edu</u> or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at <a href="mailto:DHHservices@uvu.edu">DHHservices@uvu.edu</a>

DHH is located on the Orem Campus in BA 112.

### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their <u>rights and responsibilities</u>. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in <u>UVU Policy 541: Student Code of Conduct</u>.

#### **Equity and Title IX**

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – <u>TitleIX@uvu.edu</u> – 800 W University Pkwy, Orem, 84058, Suite BA 203.

#### **Religious Accommodation**

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at <a href="mailto:accessibilityservices@uvu.edu">accessibilityservices@uvu.edu</a>. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a <u>specially dedicated</u> <u>space</u> for meditation, prayer, reflection, or other forms of religious expression.