# **DAPR 2000: Digital Audio Essentials**

Schedule: Monday–Thursday, 10:00 AM–12:15 PM Location: CS 623 Instructor: Bryan Sansom Email: <u>bryan.sansom@uvu.edu</u> Office: CS 710D and on Microsoft Teams

# **Course Description**

This course introduces foundational concepts in digital audio and sound engineering. Topics include:

- Sound propagation, absorption, reflection, and transmission
- Frequency response and decibel calculations (loudness, power, voltage)
- Basic audio editing and gain staging
- Microphone types and placement
- Monitoring fundamentals
- Recording and mixing techniques
- Dynamic processing: EQ, compression
- Time-based effects: reverb, delay, chorus, phasing
- Basic acoustic principles
- The "Who, What, Why, and How" of the audio world

# **Course Outcomes**

By the end of the course, students will be able to:

- Identify and use appropriate audio cables and connectors
- Understand microphone types, polar patterns, and use cases
- Explain the decibel and its applications in audio
- Apply concepts of basic acoustics (period, frequency, wavelength, etc.)
- Use Pro Tools to edit and mix 10-track audio sessions
- Operate basic signal processors (EQ, compression, reverb)
- Discuss frequency response and Signal-to-Noise Ratio (SNR)
- Assess sound quality and explain Fletcher-Munson curve
- Understand digital audio concepts (bit depth, sample rate, bit rate)

# **Prerequisites and Corequisites**

- Course Prerequisite/Corequisite: DAPR 2000L
- Math Recommendation: MAT 1030, MAT 1035, MATH 1050, or MATH 1055 (recommended for better comprehension)

# **Technology Skills Needed:**

• Ability to use a computer (basic functions like copy/paste and navigation)

# **Required Materials and Tools**

- Studio Headphones (Required): Suggested models: *Sennheiser HD280* or similar. *Note:* Earbuds, Bluetooth headphones, and laptop speakers are **not acceptable**.
- **Pro Tools (Required):** Students must install the **student version of Pro Tools** on their own laptops by Week 2. Download from: <u>www.avid.com</u>

Note: Pro Tools is also available on classroom machines.

# **Course Format and Expectations**

**Mode:** Face-to-Face with Online Components **Attendance:** Mandatory. Missing more than one week can significantly affect your success.

Expect to spend:

- ~9 hours/week (full semester)
- ~18 hours/week (block class)

Platform: UVU Canvas (content, grades, communication)

### You will:

- Attend every class
- Work independently and in class using Pro Tools
- Complete two mixing projects using progressively advanced tools

**Academic Integrity** 

Cheating or plagiarism will result in a zero for the assignment. Do your own work.

### **Student Responsibilities**

- Start during the first week of class
- Set regular time for coursework and meet all deadlines
- Use Canvas effectively; contact IT support if needed
- Communicate promptly about emergencies
- Late work is accepted but **automatically reduced by 11%**
- Grade disputes are welcome—this helps improve the course
- Notify the instructor in advance if missing class (treat this like a job)

### **Instructor Responsibilities**

- Respond to emails within 2 business days
- Give timely and constructive feedback
- Create a supportive, effective learning environment
- Refer students to additional services when needed
- Serve as a mentor throughout the course

# Grading

#### **Extra Credit:**

None. Instead, re-do assignments until you achieve your desired grade.

#### **Grading Scale:**

#### **Grade Percent**

А	92.5-100
A-	90–92.4
B+	87.5-89.9
В	82.5-87.4
B-	80-82.4
C+	77.5–79.9
С	72.5–77.4
C-	70–72.4
D+	67.5–69.9

#### **Grade Percent**

D 62–67.4 D- 60–61.9 E 0–59

# **Assignment Categories**

Activity	Points
DAW Mixes	140
Quizzes	170
Exams	200
Total	510

# Late Work Policy

There is no such thing as "late work"—deadlines are final. However:

- You may **re-do any assignment** submitted on time as many times as needed to improve your grade.
- If you know you'll miss a deadline, **contact the instructor beforehand** to negotiate an extension. This models real-world professionalism.

#### Assessments

- **Discussions:** Optional peer forums (not graded)
- Quizzes: To be determined
- **Exams:** To be determined
- Course Schedule: To be determined

### **University Policies & Student Support**

- <u>UVU Policies and Procedures</u>
- <u>Student Success Resources</u>
- Accessibility Services (OAS)
  - Location: LC 312, Orem Campus
  - Phone: 801-863-8747
  - Email (Deaf/HOH): <u>nicole.hemmingsen@uvu.edu</u> | Text: 385-208-2677

# **Technology Support**

# Canvas Support (24/7):

- Live Chat: <u>Canvas Support Chat</u>
- Phone: 385-204-4930

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