



COURSE SYLLABUS

Course Prefix, Number, and Title

DAD 222 – Audio Production I: Foundations

Credits

3

University Name

Dakota State University

Academic Term/Year

Fall 2025

Last date to Drop and receive 100% refund

9/4/25

Last date to Withdraw and earn a grade of 'W'

11/7/25

Course Meeting Time and Location

MWF 9:00 AM – 9:50 AM Tunheim Classroom Building 209

Instructor Information

Name

Tate Carson

Office

TCB 305

Phone Number(s)

605-681-6183

Email Address

Tate.carson@dsu.edu

Office Hours

MWF – 10 am - 12 pm, T/Th 1 – 2 pm

Please use <https://calendly.com/tate-carson/office-hours> to book a meeting.

Approved Course Description

Catalog Description

A foundation study of audio recording techniques and digital audio editing. Students learn the signal chain of professional audio mixers and DAWs by dissecting each component and rerouting

it within the chain itself. Topics include microphones, connection types, EQ, dynamic processors, basic mixing, digital manipulation, and output file formats.

Additional Course Information

This course provides a practical introduction to music technology, digital audio production, and creative sound design, with a focus on hands-on skills in the digital audio workstation Reaper. Students explore core audio concepts, including sound properties, recording, editing, mixing, MIDI sequencing, synthesis, and effects processing. Through weekly projects—ranging from arranging clips and producing commercials to beatmaking, synthesizer programming, and final portfolio work—students develop technical fluency alongside creative problem-solving. Class sessions combine guided instruction, in-class labs, and collaborative critique, ensuring that students build a strong foundation in contemporary audio production while cultivating their artistic voice.

Prerequisites

Course Prerequisite(s)

CSC 105

Technology Skills

Basic computer literacy – the ability to navigate files and applications on the Mac platform; knowledge of basic keyboard shortcuts

Student Learning Outcomes

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

1. Demonstrate proficiency in using a Digital Audio Workstation (Reaper) for recording, editing, arranging, and mixing audio projects.
2. Apply core audio concepts-including sound properties, signal flow, and the physics of hearing-to practical music and sound design tasks.
3. Record and process audio using microphones, interfaces, and studio equipment, applying editing techniques for clarity and quality.
4. Integrate MIDI sequencing, synthesis, and sampling into original music and sound design projects.
5. Use audio effects and processing tools (EQ, compression, reverb, delay, modulation) creatively and technically to enhance productions.
6. Plan, execute, and present creative audio projects that meet professional and artistic standards.
7. Collaborate and critique constructively in a studio environment, incorporating peer and instructor feedback into project revisions.

Course Materials

Required Textbook(s)

None

Required Supplementary Materials

- Headphones: Students **must** bring industry-standard headphones to each class.
Recommended headphones:
Budget (\$28 – 50\$): [Sennheiser HD206](#), [ATH-M20X](#)
Midrange (\$50-\$100): [Shure SRH440](#), Sony, or Sennheiser in this range are good as well
No earbuds or noise cancellation.

Headphones are also available for rent. Fill out request form [here](#).

Optional Materials

Modern Recording Techniques Ninth Edition by David Miles Huber and Robert E. Runstein

Available as an eBook in the DSU Library

Course Delivery and Instructional Methods

DAD 222 is a project-based course that requires the completion of original sound design works using digital tools accessible in the computer lab.

Communication and Feedback

Preferred Contact Method

Tate.carson@dsu.edu

Email Response Time

I will respond to your email within 48 hours during the school week.

Feedback on Assignments

Within 1-2 weeks of the assignment due date

Evaluation Procedures

Assessments

Attendance/Participation: 30%

Projects: 50%

Final project and proposal: 20%

Final Examination

Friday, December 12, 8 – 10 am

Performance Standards and Grading Policy

90% and above = A

80%-89% = B

70%-79% = C

60% - 69% = D

59% or below = F

Tentative Course Outline and Schedule

Week	Date	Topics, Assignments, Quizzes, Tests, Deadlines
1	8/25	<p>Monday</p> <ul style="list-style-type: none"> • Class introductions: name, major, last song listened to • Introduction to syllabus • Intro to Music Technology slides • Homework: Your favorite song — Due Friday 8/29 <p>Wednesday</p> <ul style="list-style-type: none"> • Favorite song due Friday • Finish Intro to Music Technology slides <p>Friday</p> <ul style="list-style-type: none"> • Sound and hearing slides
2	9/1	<p>Monday</p> <ul style="list-style-type: none"> • No Class - Labor Day <p>Wednesday</p> <ul style="list-style-type: none"> • Listen to some of your songs • Introduction to Reaper <p>Friday</p> <ul style="list-style-type: none"> • Continue Introduction to Reaper • Saving and exporting • Introduce Project 1: Arranging Clips — Due 9/12
3	9/8	<p>Monday</p> <ul style="list-style-type: none"> • Listen to favorite songs • Show loops project example • Work on loops project in class <p>Wednesday</p>

Week	Date	Topics, Assignments, Quizzes, Tests, Deadlines
		<ul style="list-style-type: none"> Layering and mixing Audio Hardware slides <p>Friday</p> <ul style="list-style-type: none"> Finish in-class project (mix & export) Finish Audio Hardware slides Project 2: Unreliable Product Ad — script ready by 9/22
4	9/15	<p>Monday</p> <ul style="list-style-type: none"> Digital Audio Data <p>Wednesday</p> <ul style="list-style-type: none"> Move to studio: Studio tour & microphones presentation Review Studio Documentation Reaper Recording demo <p>Friday</p> <ul style="list-style-type: none"> Editing commercials in Reaper
5	9/22	<p>Monday</p> <ul style="list-style-type: none"> Unreliable Product Ad — Due 10/2 Recording/editing practice <p>Wednesday</p> <ul style="list-style-type: none"> Sound effects & music beds Mixing tips <p>Friday</p> <ul style="list-style-type: none"> FX Roulette game
6	9/29	<p>Monday</p> <ul style="list-style-type: none"> EQ

Week	Date	Topics, Assignments, Quizzes, Tests, Deadlines
		Wednesday <ul style="list-style-type: none"> Listen to ads in class EQ in-class assignment Friday <ul style="list-style-type: none"> Join DSU Animation Studio Discord EQ on multitrack recording Project 2 Due 10/2
7	10/6	Monday <ul style="list-style-type: none"> Dynamics effects (ReaComp, ReaXComp, ReaLimit, ReaGate) Wednesday <ul style="list-style-type: none"> Time-based effects: Delay, Chorus, Flange Friday <ul style="list-style-type: none"> Reverb
8	10/13	Monday <ul style="list-style-type: none"> Native American Day — No Class Wednesday <ul style="list-style-type: none"> Project 3: In-class mixing assignment — Due 10/24 Friday <ul style="list-style-type: none"> Continue Project 3 Mid-term Exam Period
9	10/20	Monday <ul style="list-style-type: none"> Sampling + MIDI Sampling History Who Sampled — find & present examples Wednesday

Week	Date	Topics, Assignments, Quizzes, Tests, Deadlines
		<ul style="list-style-type: none"> • MIDI History • Install Sitala Drum Sampler • Build simple drum loop <p>Friday</p> <ul style="list-style-type: none"> • MIDI Intro • Create 2-bar loop with samples • Project 3 Due 10/24 • Project 4: Drum Programming — Due 11/3
10	10/27	<p>Monday</p> <ul style="list-style-type: none"> • Beatmaking project work • Beatmaking listening examples <p>Wednesday</p> <ul style="list-style-type: none"> • Synthesis and MIDI: Electronic sound production <p>Friday</p> <ul style="list-style-type: none"> • Vital Synth introduction • Preset analysis
11	11/3	<p>Monday</p> <ul style="list-style-type: none"> • Vital Synth overview • Read Vital Synth Manual <p>Wednesday</p> <ul style="list-style-type: none"> • Adaptive Grid Tool • Vital modulation: LFO & envelopes <p>Friday</p> <ul style="list-style-type: none"> • Effects & post-processing • Last day to withdraw • Project 5: Vital Synth — Due 11/21
12	11/10	<p>Monday</p>

Week	Date	Topics, Assignments, Quizzes, Tests, Deadlines
		<ul style="list-style-type: none"> Drum synthesis <p>Wednesday</p> <ul style="list-style-type: none"> Leads and keys <p>Friday</p> <ul style="list-style-type: none"> Building a full patch with macros
13	11/17	<p>Monday</p> <ul style="list-style-type: none"> Vital patch sharing Final project brainstorming <p>Wednesday</p> <ul style="list-style-type: none"> Group brainstorming & work session <p>Friday</p> <ul style="list-style-type: none"> Play Vital projects Present final project proposals
14	11/24	<p>Monday</p> <ul style="list-style-type: none"> Technical setup day — split into studio & independent work groups <p>Wednesday</p> <ul style="list-style-type: none"> Thanksgiving Break — No Class <p>Friday</p> <ul style="list-style-type: none"> Thanksgiving Break — No Class
15	12/1	<p>Monday</p> <ul style="list-style-type: none"> Critique session: 2–3 minutes of each project <p>Wednesday</p> <ul style="list-style-type: none"> Guided work session — split into groups

Week	Date	Topics, Assignments, Quizzes, Tests, Deadlines
		Friday <ul style="list-style-type: none"> Focused sharing session: identify struggles & get feedback
16	12/8	Monday <ul style="list-style-type: none"> Course evaluations Final Q&A Wednesday <ul style="list-style-type: none"> Reading/Study Day — No Class Friday <ul style="list-style-type: none"> Final Exam Presentation — 12/12, 8:00–10:00 AM

Student Success Services and Supports

ADA Accommodations

Dakota State University strives to ensure that physical resources, as well as information and communication technologies, are reasonably accessible to users to provide equal access to all. If you encounter any accessibility issues, you are encouraged to immediately contact the instructor of the course and Dakota State University's Office of Disability Services, which will work to resolve the issue as quickly as possible.

DSU's Office of Disability Services is located in the Learning Engagement Center and can be contacted by calling 605-256-5121 or emailing dsu-ada@dsu.edu. Students seeking ADA accommodations (such as non-standard note taking or extended time and/or a quiet space taking exams and quizzes) can access the DSU website <https://dsu.edu/student-life/disability-services/index.html> for additional information and the link to the Disability Services Request Form. You will need to provide documentation of your disability and the ADA Coordinator must confirm the need before officially authorizing accommodations.

DSU Knowledge Base

The DSU Knowledge Base contains links and resources to help students by providing information about the following topics: User Accounts & Passwords, Academic Tools & Resources, Software & Apps Support, WiFi & Network Access, Campus Emergency Alert System, Campus Printing, IT Security & Safe Computing, and the Support Desk (which is there to help both on and off-campus students). The Knowledge Base can be accessed through the link below:

- [DSU Knowledge Base](#)

D2L Support for Students

The D2L Support for Students site is designed to provide DSU students a D2L support resource center that contains user guides, tutorials, and tips for using the D2L learning environment. The D2L Support for Students site can be accessed through the link below:

- [DSU D2L Support Resources for Students](#)

Classroom Policies

Attendance and Make-up Policy

Students are expected to attend all scheduled classes. After **three** absences, 10 points will be deducted from the attendance grade for each additional absence.

Late work will only be accepted with a documented excuse. Students may redo work they received an undesirable grade on once, but only if they turned in something by the original due date. The deadline for redoing work is a week after the original due date. After this time, no late work will be accepted.

DSU Policies

Complaint Procedure

Dakota State University seeks to resolve student concerns and complaints in a fair and prompt manner. Students may file a complaint using the [DSU Concerns and Feedback form](#). SARA complaints from out-of-state students may be filed using the procedures noted [here](#).

Grade Appeal Policy

If a student believes the final grade assigned in a course was inappropriate, he/she may appeal that grade by filing a formal grade appeal within 15 days of the start of the next academic session. Please see the DSU policy on [Appealing Academic and Administrative Decisions](#) for the required process and form to appeal a final grade.

Student Verification Statement and Proctoring Policy

Federal law requires that universities verify the identity of students when course materials and/or course assessment activities are conducted either partially or entirely online. A student's Desire2Learn (D2L) login and password are intended to provide the student with secure access to course materials and are also intended to help the university meet this federal mandate. Some DSU Faculty also require the use of a proctor for exams in distance-delivered (Internet) courses and this requirement provides a second level of student identity verification. Students are responsible for any proctoring fees, if applicable. Finally, an instructor who uses web conferencing technology may require students to use a webcam during exams as another means of student identity verification through voice and visual recognition.

<< For online courses, include the verification method used for the course (i.e., proctoring, portfolio, oral exam, student observation, etc.) >>

South Dakota Board of Regents Policy Statements

Freedom in Learning Statement

Under Board of Regents and Regental Institutions policy, student academic performance may be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Discussion and debate are critical to education and professional development. Students should be free to take reasoned exception to the data or views offered

in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. While the exploration of controversial topics may be an important component of meeting the student learning outcomes in a course, no student will be compelled or directed to personally affirm, adopt, or adhere to any divisive concepts (as defined in SDCL 13-1-67). Students who believe that an academic evaluation reflects prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards should contact their home institution to initiate a review of the evaluation.

ADA Statement

The Regental Institutions strive to ensure that physical resources, as well as information and communication technologies, are reasonably accessible to users to provide equal access to all. If you encounter any accessibility issues, you are encouraged to immediately contact the instructor of the course and the Office of Disability Services, which will work to resolve the issue as quickly as possible. Please note: if your home institution is not the institution you are enrolled at for a course (host institution), then you should contact your home institution's Office of Disability services. The disability services at the home and host institution will work together to ensure your request is evaluated and responded to in a timely manner.

Academic Dishonesty and Misconduct

Cheating and other forms of academic dishonesty and misconduct run contrary to the purposes of higher education and will not be tolerated. Academic dishonesty includes, but is not limited to, plagiarism, copying answers or work done by another student (either on an exam or an assignment), allowing another student to copy from you, and using unauthorized materials during an exam. The Regental Institution's policy and procedures on cheating and academic dishonesty can be found in your home institution's Student Handbook and the governing Board of Regents policies can be found in [BOR Policy 2.9.2](#) and [BOR Policy 3.4.1](#). The consequences for cheating and academic dishonesty are outlined in policy.

Acceptable Use of Technology

Acceptable Use of Information Technology Resources: While Regental Institutions strive to provide access to computer labs and other technology, it is the student's responsibility to ensure adequate access to the technology required for a course. This may include access to a computer (not Chromebooks, iPads, etc.), webcam, internet, adequate bandwidth, etc. While utilizing any of the information technology systems students, faculty and staff should observe all relevant laws, regulations, [BOR Policy 7.1](#), and any institutional procedural requirements.

Emergency Alert Communication

In the event of an emergency arising on campus under [BOR Policy 7.3](#), your Regental Home Institution will notify the campus community via the emergency alert system. It is the responsibility of the student to ensure that their information is updated in the emergency alert system. The student's cell phone will be automatically inserted if available and if not, their email address is loaded. Students can at any time update their information the student alert system.