



COURSE SYLLABUS

Course Prefix, Number, and Title

DAD 424 Sound Design for Games

Credits

3

University Name

Dakota State University

Academic Term/Year

Spring 2024

Last date to Drop and receive 100% refund

1/17/24

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

4/2/24

Course Meeting Time and Location

Tuesday/Thursday 1:00 pm – 2:15 pm TCB 209

Instructor Information

Name

Tate Carson

Office

TCB 209

Phone Number(s)

605-681-6183

Email Address

Tate.carson@dsu.edu

Office Hours

MWF 10 am – 12 pm, TR 2:30 – 3:30 pm

Approved Course Description

Catalog Description

This course examines the roles and functions of sound in games and non-linear media. Students will design sound using synthesizers and samplers for various game genres and non-linear media. Emphasis is given to studio recording techniques to create sound effects and dialogue.

Students will also learn audio implementation using standard game audio middleware tools to place their sound design into an interactive game environment.

Additional Course Information

This course focuses on creating interactive audio and music for games. The first part of the semester will cover sound design for games, creating sound effects, and preparing them for implementation. Then, we will learn Audiokinetic's Wwise audio middleware to implement sound and music in video games. The second half of the semester will involve collaborations with the game design class to create an original game.

Prerequisites

Course Prerequisite(s)

MUS 204 or DAD 222

Technology Skills

Basic computer programming

Basic audio skills: ability to create sound effects and music with a DAW

Student Learning Outcomes

- Develop audio content and effectively integrate it into video game environments.
- Craft music compositions that dynamically alter in response to in-game events and interactions.
- Engineer distinctive soundscapes, dialogue, and creature vocalizations to enhance the immersive experience of a game.
- Master the extensive capabilities of Audiokinetic's Wwise software for sound design and audio authoring in gaming.
- Sound design for a real game.

Course Materials

Required Textbook(s)

[Horowitz, Steve, and Scott R Looney. The Essential Guide to Game Audio: The Theory and Practice of Sound for Games. 1st ed. Abingdon: Focal Press, 2014.](#)

Required Supplementary Materials

Software: [Unity Game Engine](#), [Wwise Audio Middleware](#)

Course Delivery and Instructional Methods

DAD 424 is a project-based course that requires completing sound design and audio implementation projects for games.

Communication and Feedback

Preferred Email Contact Method

Tate.carson@dsu.edu

Email Response Time

Within 48 hours when class is in session.

Feedback on Assignments

Within one week of the assignment due date.

Evaluation Procedures

Assessments

- Attendance/Participation (20%)
- Projects (30%)
- Exercises (20%)
- Final project (30%)

Final Examination

May 2, 1:00 pm – 3:00 pm

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	1/8	Syllabus overview Game Audio History
2	1/15	Audio for interactive environments Game Styles and Genres
3	1/22	Sound design in games
4	1/29	Voiceover recording
5	2/5	Creature sound design Magic sound effects
6	2/12	Composing music for games Audio preparation
7	2/19	Audio implementation Understanding Audio Middleware

Week	Date	Topics, Assignments, Quizzes, Tests, Deadlines
8	2/26	Wwise: Intro and Installation Intro to Unity 3D
9	3/4	Wwise: Position, Attenuation, and Profiling
10	3/11	Spring Break – no classes
11	3/18	Wwise: Position Types, States, Game Parameters and Blend Containers Audio Buses, Mixing, and Reverb Zones
12	3/25	Wwise: Interactive Music
13	4/1	Collaborations with Game Design class
14	4/8	Collaborations with Game Design class Group project check-in
15	4/15	Collaborations with Game Design class
16	4/22	Collaborations with Game Design class

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 on which they received an undesirable grade 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 [Undergraduate Catalog](#) or [Graduate Catalog](#) for the required process 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, AAC Guideline 5.3.A – Syllabi BOR Required Policy Statements (Last Revised 01/2023) Page 2 of 2 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 2:33 and BOR Policy 3:4. 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 in the student alert system.