DAGV 2470 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: DAGV **Course and Section #:** *2470 001*
Course Title: Game Dev II **Credits:** *3*

Course Description

This course builds on foundational game development skills, focusing on advanced techniques in coding, game mechanics, and team-based production workflows. Students will design and develop games using industry-standard tools, with an emphasis on modular design, performance optimization, and publishing workflows. Collaborative teamwork and project management skills are integrated into the course.

Course Attributes

☐ Discipline Core Requirements in Program

Instructor Information

Instructor Name: *Anthony Romrell*

Upon successful completion of this course, students will be able to:

1. Develop and optimize complex game mechanics using modular and reusable code.
2. Implement advanced gameplay features such as AI, procedural generation, and UI systems.
3. Collaborate effectively in team environments using Git for version control.
4. Publish a polished game on a chosen platform.

Course Materials and Texts

Canvas, and Teams
- **Required Tools:** Maya for Students, ZBrush, Unity, Marvelous Designer, Substance Painter.

Assignments, Assessments, and Grading Policy

- **Assignments:** Weekly coding exercises and challenges (25%)
- **Projects:** Team-based game development projects, including midterm and final (50%)
- **Participation:** Engagement in discussions, critiques, and teamwork (15%)
- **Quizzes:** Periodic assessments of theoretical knowledge (10%)

Late Policy

- Assignments are subject to a 10% late penalty per day, with a cut-off at one week after the due date.

Required or Recommended Reading Assignments

Nome

Weeks 1-2: Team Formation and Project Planning

- Introduction to advanced game development workflows and Git for collaboration.
- Team brainstorming and project proposal submission.

Weeks 3-5: Gameplay Mechanics and Modular Design

- **Week 3:** Implementing player controls and interaction systems.
- **Week 4:** Building modular systems using ScriptableObjects and event-driven programming.
- **Week 5:** Adding advanced AI behaviors.

Weeks 6-7: Midterm Project Development

- Team presentations of gameplay prototypes.
- Midterm submission and feedback for iteration.

Weeks 8-10: Advanced Features and Optimization

- **Week 8:** Procedural generation for levels and assets.
- **Week 9:** UI and HUD systems integration.
- **Week 10:** Performance optimization and profiling.

Weeks 11-12: Final Project Development

- Polishing game mechanics, assets, and performance.
- Playtesting and debugging.

Weeks 13-14: Final Presentations and Publishing

- Publishing the final game on a chosen platform (e.g., Steam, Google Play, Apple App Store).
- Team presentations and peer feedback.

Weekly Deliverables

- **Accountability Video:** 1-minute video summarizing weekly progress.
- **Assignment Submission:** Coding exercises, project updates, and documentation.
- **GitHub Repository:** Teams will fork and manage repositories collaboratively.

Required Course Syllabus Statements

Generative AI
The use of generative AI tools is permitted for reference and inspiration purposes only. All submitted work must be original and created by the student. Plagiarism, including the uncredited use of AI-generated content, is strictly prohibited and will be addressed according to university policies.

Using Remote Testing Software
☐ This course does not use remote testing software.

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 [Accessibility Services](#) at accessibilityservices@uvu.edu 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 DHHservices@uvu.edu

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 rights and responsibilities. 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 UVU Policy 541: *Student Code of Conduct*.

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 – TitleIX@uvu.edu – 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 accessibilityservices@uvu.edu. 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 specially dedicated space for meditation, prayer, reflection, or other forms of religious expression.