Bergen Community College

Division of Arts and Humanities
Department of Visual Arts

Course Syllabus

Course Designation, Number, and Title

ART-293: Advanced 3-Dimensional Animation

Basic Information About Course and Instructor

Semester and Year:
Section Number:
Meeting Times:
Location:

Instructor:
Office Location:
Phone:
Office Hours:
Email Address:

Course Description

Official Catalog Course Description

This advanced course builds on foundational 3D animation techniques, introducing students to complex modeling, rigging, texturing, and rendering processes. Students will refine their skills in animation principles and cinematography within a 3D environment. The course emphasizes industry-standard software tools and workflows, preparing students for professional animation projects.

Credits: 4 (2 lectures, 2 labs)
Prerequisites: ART-192: 3-Dimensional Animation I
Corequisites: None

Student Learning Outcomes

As a result of meeting the requirements of this course, students will be able to:

1. Demonstrate proficiency in advanced 3D animation tools and techniques.
2. Apply principles of character rigging and motion dynamics.
3. Design and execute high-quality animated sequences.
4. Critically assess and improve their own work and peer projects.
5. Utilize professional rendering techniques for final production.

Means of Assessment

Assessment will be based on the quality of animation projects, which will demonstrate specific technical and creative skills covered in the Course Content section.

Course Content

This course includes lectures, demonstrations, studio time, and critiques.

Major Topics Covered:

- Advanced 3D modeling techniques
- Character rigging and animation
- Motion capture and procedural animation
- Lighting and shading for realism
- Rendering and compositing
- Professional animation workflows

Course Texts and Other Study Materials

- Students must have access to media for saving and backing up coursework.
- Software and training materials will be provided and accessible in the free-time labs.

Research, Writing, and/or Examination Requirements

- Students will be evaluated based on completed projects that showcase technical and artistic growth.

- Each project must demonstrate originality, mastery of skills, and professional presentation.

Grading Policy

- **A:** Outstanding work demonstrating originality, technical mastery, and creativity.
- **B:** High-quality work with strong technical competence and artistic decision-making.
- **C:** Satisfactory completion of assignments with some weaknesses in execution.
- **D:** Marginally meets course requirements but lacks refinement and creativity.
- **F:** Fails to meet course requirements or submission criteria.

Attendance Policy

All students are expected to attend every scheduled meeting of each course. Attendance policies will be determined by the instructor and included in the individual course outline.

Other College, Divisional, and/or Departmental Policy Statements

- **Plagiarism and Academic Dishonesty:** Students must adhere to BCC's academic integrity policies.
- **ADA Statement:** Students with documented disabilities should contact the Office of Specialized Services.
- **Use of AI Tools:** See BCC's AI Guidance Resource Page for proper use.

Student and Faculty Support Services

- **Accessibility Statement:** Contact the Office of Specialized Services at (201) 612-5270 or visit www.bergen.edu/oss for accommodations.
- **Student Support Services:** Visit https://bergen.edu/currentstudents/ for academic support, tutoring, and advising.
- **Library Resources:** Access online research guides at https://bergen.edu/library/.

Course Outline and Calendar

Week	Topic/Activity	Assignments/Events

1	Introduction to Advanced 3D Animation	Initial exercises
2	Advanced Modeling Techniques	Tutorial
3	Character Rigging and Deformations	Begin Rigging Project
4	Motion Capture and Animation Principles	Continue Rigging Project
5	Physics-Based Animation	Begin Motion Project
6	Camera Techniques in 3D Animation	Continue Motion Project
7	Mid-Term Review & Critique	Present Projects
8	Texturing and Shading	Begin Final Animation Project
9	Lighting for Realism	Continue Final Animation Project
10	Rendering and Compositing	Continue Final Animation Project
11	Special Topics in 3D Animation	Continue Final Animation Project
12	Industry Workflows & Portfolio Preparation	Final Animation Polish
13	Final Project Critique	Present Work
14	Final Review and Submission	Course Wrap-Up

Note: This Course Outline and Calendar is tentative and subject to change based on class progress.
