

**Bergen Community College
Information Technology
Course Syllabus**

Course Title:

GAM-221
Game Programming 3D

Credits/Hours:

3 credits/2 hours lecture, 2-hour lab.

Prerequisite:

GAM-111 Game Programming 2D

Course Description:

This course provides the student game programming knowledge and skills required for making 3D games. A professional game development platform will be investigated along with object-oriented programming concepts which include arrays, classes, properties, delegates, interfaces, and event handling. Students will also learn techniques for using a platform-integrated game engine to create game levels using terrain, material, object and other level editing tools.

Textbooks and Supplies:

See course outline.

Student Learning Objectives	Assessment Measures
1. Create programs which display game assets that can be manipulated by the player, implement physics, triggers and collisions, accept player inputs via a GUI, implement gameplay, display results and provide audio feedback.	Assignment Exam
2. Utilize a 3D game engine and associated editors to create a game level with environmental and 3D game assets.	Assignment Exam
3. Apply game production practices by planning, designing, developing and testing games	Assignment

College Competencies:	Student Learning Objective:
TECHNOLOGICAL AND INFORMATION FLUENCY	1-3
APPLIED KNOWLEDGE	3
CREATIVITY AND AESTHETIC APPRECIATION	1

Course Content:

See course outline

Assessment:

An average of 60% from combined assessment measures is required to demonstrate proficiency in course material.

Exams and Projects	70%
Assignments	30%
Quizzes and Labs (Instructor Discretion)	Bonus Points

Quizzes:

There may be several quizzes, each worth 10 points, given at the beginning pre-selected classes. The quiz material will be based upon the prior lectures and labs, homework, and/or the reading assignments. A quiz cannot be made up if missed. A student entering class late, after a quiz has begun, will not be entitled to extra time to complete the quiz. Students entering class after a quiz is completed will not be permitted to take the quiz and a zero grade will be assigned.

Testing:

Students **are required** to take examinations on the day and time they are scheduled. If special circumstances require a test schedule adjustment, this must be **worked out in advance** with the instructor. If a student misses an exam (except for prearranged circumstances with the instructor) a zero grade will be assigned.

The instructor can be reached by **telephone** (see course outline for appropriate phone number), **e-mail, or a written note** can be left in the Divisional Office (during the day) A-306C or in the Evening Office L-113. If there are extreme circumstances (documentation may be required) that prevent a student from taking a test or an exam according to the published schedule, the student should use one of the above options to contact the instructor before the next class. An arrangement for a special testing schedule is solely at the **discretion of the instructor**. A student who waits for the next class session to speak with the instructor will not be accommodated with a special test schedule.

The use of electronic devices during exams is prohibited. Any student using an electronic device during an exam (unless directed to do so by the instructor) will receive a 0 for the exam.

Projects, Assignments, Laboratory Work:

Assignments are hands-on productions that show the instructor that the student understands concepts presented in class and in the readings and can competently use specified software to apply specific concepts.

It is anticipated that students will spend at least 4 hours per week perfecting their skills and completing their assignments and homework. Some assignments are required for grading. They must be submitted on the assignment due date, and **cannot be handed in late**. Acceptance of late assignments is solely at the **discretion of the instructor**.

Some assignments are instructional and need not be submitted. . These lab assignments will help students prepare for graded assignments, quizzes, and exams.

Homework:

In addition to any homework assignment given during class, it is a **standing assignment** that the student read each chapter of the book prior to its discussion. Following the class discussion, the student should reread the material and work with the exercises throughout the text. It is anticipated that students will spend at least 4-hours per week reading the text, working with the exercises and supplemental resources, and completing assignments.

Policies:

- Lateness – The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.
- The student must adhere to all college policies. Due to the nature of this course, it is recommended that the student review the policy titled “*Acceptable Information Technology Use at Bergen Community College*”.
- The use of portable electronic devices such as pagers and cell phones is not permitted while class is in session. Please be sure to silence electronic devices before entering class.
- The use of audio CD or tape players, radios, and college computers to play music during class is prohibited.

- Students are expected to demonstrate listening, reading, note taking, and writing skills. The student will need to take notes during class discussions and understand and follow verbal and written directions. All assignments and correspondence with the instructor (including e-mail) must be well written in full sentence format. Proper paragraph format must be used for all postings to the student bulletin board (if applicable).
- The subject line of all e-mail correspondence to the instructor must contain the course number and section and student's name. Any e-mail received without this information will not be opened.
- Plagiarism in any form will be treated as a failure to complete an assignment. All work submitted should reflect individual effort by the student.
- In borderline cases that arise in almost every class each semester a student's attendance, class participation, attitude, and observed effort will be considered in helping to determine the student's final grade.

If the instructor does not appear after 20 minutes following the scheduled time, students should generate an attendance list. One volunteer member need deliver the list, containing the course title, date, and instructor's name, to the Evening Office L-113 or to the Divisional Office (during the day) A-306C.

Additional policy and assessment information may be distributed by individual instructors.