

GAME 1071 Game Scripting I

Class Includes: Introduction to scripting using the NWN engine.

Class Work: The first half of the class is devoted to learning basic scripting concepts and demonstrating them using Never Winter Nights. The second half of the class is devoted to the practical use of scripting as it applies to solving problems, planning content, and implementing systems in a game.

Prerequisites: GAME 1019 Practical Game Design Skills & GAME 1010 Video Game Programming

Class Schedule: Saturday, 9:00 a.m. – 12:00 p.m.

Room: HBC 301.3

Instructor: Pete Warner

Course Description: This course is designed to give the student a good fundamental grasp of scripting concepts as well as the understanding of how to apply these principles as a designer when planning and implementing content. Although in this course we will not be making a full module in NWN, we will be scripting to solve problems and writing scripts for individual content/systems.

Approved Course Text: **There is no course text for this class.**

Instructional Methodology: Lecture and Discussion. Scripting exercises and examples, as well as two formal tests.

Course Rationale: This course is designed to give the student a technical game design skillset. Technical design involves scripting and the planning of how to deliver content.

Course Objectives / Learning Outcomes: The student is expected to be able to demonstrate that they grasp the fundamentals of writing script in nwn. The student must also demonstrate that they understand how these principles are applied in both planning content and delivering it via scripting. The student will develop problem solving and logic skills that can be applied to the field of technical design.

Who Should Enroll in this Course: Students who wish to learn the basic fundamentals of game scripting and lean towards a more technical approach to game design.

Course Modules:

- Proper and Good coding practices
- Scripting Syntax
- Variables

- Evaluators
- Switches
- Loops
- Triggers
- Functions
- Messages / delayed commands
- Problem solving and debugging
- Code refactoring
- Code Efficiency
- AI Scripting
- Importing and exporting and merging script.
- Flowcharting and planning code

Grading and Examinations:

Grading Policies

College work must exhibit higher order thinking skills including analysis, synthesis, and evaluation. Mere knowledge about a situation or demonstration of comprehension of the material is not sufficient to prepare you for employment consideration. As a Video Game Development student, you must consistently apply higher order thinking in order demonstrate mastery of the material covered in this course. Grades are given for results not for effort. Read the definitions for each grade noted below, as this is really how grades are determined. Grading is based on an absolute scale - you are not competing with anyone else, but you will be challenging yourself. There are no distributions of grades; hence, all of you can earn an A in this course. Note: Students earns grades, Faculty members do not give them. Your final grade will be based on both individual and learning team performance. Your final grade will be based on the points that you earn during the course. You may receive “fractions” of points on some assignments. When calculating your final grade, I will use the standard rounding convention – meaning that scores with a fraction of $\frac{1}{2}$ or greater will be rounded up, those with a score of less than $\frac{1}{2}$ will be rounded down. I will use the following grading scale to calculate your letter grade. The grading scale is based on a 100-point (or percentage) scale:

How points and percentages equate to grades

A 90 and above

A = Excellent performance. Work is exemplary and worthy of emulation by others. Student is in full attendance and constructively contributes to the learning environment.

B 80-89

B = Above average performance. All assignments are complete and exhibit a complete understanding and an ability to apply concepts.

C 70-79

C = Average performance. Accomplishes only the minimum requirements. Oral and written communication is at an acceptable level for a college student.

D 60-69

D = Demonstrates understanding at the most rudimentary level. Work is minimally passing.

F < 59

F= Work is not passing, characterized by incompleteness, lateness, unsatisfactory demonstration of understanding and application.

There will be no traditional exams in this course. Your grade will be based on the quality of the written works which you submit (e.g. game reviews), the quality of your projects and presentations (e.g. original game concept document, game rule modifications), class participation, and various quizzes which may be offered. Each assignment will be graded on a 4-point scale (with 4.0 as the maximum value). A letter grade will also be given for clarity (e.g. 3.6 = "A-"). The breakdown for the four areas of the student's final grade is as follows:

Midterm test

- 40% of the final grade
- 10 scripting problems that require scripting in nwn

Final Test

- 50% of final grade
- Scripting scenarios
- Student must demonstrate they can plan scripting tasks
- Students must demonstrate they are aware of alternatives to a scripting approach and be able to justify why their solution is better than others
- Students must debug and fix code that is not working.

Attendance and participation (10% of final grade)

Grade Policy and Scale: Your final grade for the class will be calculated by averaging the points received for each of the four areas and then weighting that area average according to the table above. Once this weighting and averaging has occurred, the following table will be used to determine the your final grade for the class. It is possible that a curve may be applied to the final class grades.

3.5 - 4.0 A

2.5 - 3.4 B

1.5 - 2.4 C

0.5 - 1.4 D

0.0 - 0.4 F

Late Assignment Policy: For each day that an assignment is late, 1.0 point will be deducted from the grade for that assignment. Since assignments are graded on a 4-point scale, this represents the loss of a full letter grade per day that the assignment is late. The maximum number of points deducted in this way will be 3.0 .

Incomplete: A student may receive a temporary grade of "I" (Incomplete) at the end of the semester only if ALL the following conditions are satisfied:

1. The student is unable to complete the course during the semester due to circumstances beyond their control.
2. The student must have earned at least half of the grade points needed for a "C" by the end of the semester.
3. The request for the grade must be made in person at the instructor's office and necessary documents completed.
4. To remove an "I", the student must complete the course by two weeks before the end of the following semester. Failure to do so will result in the grade automatically reverting to an "F".

Freedom of Expression Policy: It is expected that faculty and students will respect the views of others when expressed in classroom discussions. As a course with a high level of discussion, it is imperative that everyone in the class feel comfortable expressing their views.

Academic Integrity: A student is expected to complete his or her own projects and tests. Students are responsible for observing the policy on academic integrity described in the Current ACC Student Handbook.

"Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their own thought, research or self-expression. Academic work is defined as, but not limited to tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations, and homework."

The penalty assessed for violations will be in accordance with the current ACC Student Handbook policy. See <http://www.austincc.edu/handbook/policies4.htm> for more information.

Attendance and Participation Policy: The official college policy states that students are expected to attend classes and will be held responsible for all material covered in class. Regular attendance helps ensure satisfactory progress towards completion of the course. Participation in this case means actively participating in the class assignments and discussions. As you can see above, Attendance and Participation will account for 20% of your final grade in the class.

Video Game Development Program Philosophy

The Video Game Development Program has been designed, developed and implemented in partnership with leading video games studio managers and directors in Austin. The video games industry has undergone significant changes in how games are developed. They are rarely developed by few persons working in isolation. Today's games are often developed by teams of 50 to 200 on

schedules from 2 to 3 years with budgets of \$10M to \$20M. The large publishers drive the game development funding and schedules. Consequently, it is critical that personnel in the industry communicate and collaborate effectively.

This drove the certificate requirements definition. Students are required to successfully complete courses in four categories:

1. The base industry courses: Video Games Industry, Business of Video Games and Video Games Development.

a. Students will understand what drives the industry, why games are developed, what is needed for success and how to get from idea to delivery.

2. The course specialization courses: Video Game Programming, Video Game Art, Video Game Design and Video Game Production.

a. Students will understand the requirements, objectives, limitations and goals of the different disciplines in a studio. This is essential for communication and collaboration.

b. Students in these core courses will be cross-discipline in order to build an understanding and appreciation of how different discipline teams collaborate and contribute to the final product.

3. The five specialization electives.

a. Students will develop skills in the discipline in which the student will seek employment.

4. Non-specialization electives

a. These are optional courses that will give you a deeper understanding of what other disciplines do and how they function. They will help you understand how to work with others on the team and to get the 'big picture.' These courses do not count towards the Video Game development certificate.

5. Capstone Project
a. This multi-person team project will simulate the real video game development environment. Students will develop a concept, turn it into a design, implement the programming and art required and produce it on the committed schedule.

Go/no go milestones and final "publisher" acceptance reviews will mimic the industry. The students will have a deliverable for their portfolio that can be used for employment purposes.

Throughout the program each course will focus on knowledge transfer, skill building and teamwork. There will be a heavy emphasis on projects that will broaden and deepen each student's portfolio development. Portfolios are critical to demonstrating an individual's capabilities. Some projects will be individual, many will be team based.

How much a student gets out of each course will largely be determined by how much the student puts into the course. Video game development is highly complex, difficult work. The courses are designed to prepare students for that environment.

So, come expecting to work hard.

The program is designed to reinforce key concepts such as teamwork, collaboration, and cooperation across all disciplines in the games development

and management process. Many concepts are repeated throughout the program because they are extremely important to successful game development.