

Introduction to Game Design & Development | Spring 2009



Course | GAME 1303: Introduction to Game Design & Development

6 Credit Hours (2 Lecture, 4 Lab)

Section | 8001 | TR 12:00-2:25pm | T250

Instructor | Jeremy H. Roden

Office Hours | Posted on Office Door

JRoden@DCCCD.EDU

Office: 972.761.6830

Mailbox: B101 or Office Door

Richland phone: 972-238-6140

The instructor reserves the right to amend this syllabus as necessary.

COURSE DESCRIPTION |

This course is designed to introduce the student to Interactive Simulation & Game Technology design and development. Learning outcome topics include the history of video games, project management, concept development, professional production practices, game engines, tools, careers, current events and trends in the game development industry.

Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry.

END OF COURSE OUTCOME |

Upon completion of GAME 1303, the student will have worked through a series of projects that allow him/her to understand the creative and technical challenges behind video game design & development. Furthermore, the project directives will promote team building and collaboration.

NOTE |

GAME 1303 is designed as a survey and cooperative learning course where each module is followed with a hands on project.

OBJECTIVE SHEETS |

Each module is accompanied with a project objective sheet listing objectives, learning outcomes, directives, resources, due dates and grading rubrics.

FORMAL JURY & ASSESSMENT |

At the conclusion of each module, the student is responsible for presenting their work in a jury format where the students, faculty and visiting guests will discuss the work in an open format.

SOFTWARE |

This course is designed to be used with Softimage XSI, Photoshop and Valve's Source game engine/tools, however, depending on the professional background of the instructor, other software can certainly be used.

PREREQUISITES | None

INSTRUCTIONAL & DELIVERY METHODS |

- Lectures facilitated with visuals.
- Textbook, Training DVD's and Online Resources
- Activity Quizzes
- Differentiated Instruction
- Independent Student Work
- Individual and Team Projects (Objective Sheets for Each Module)
- Cooperative Learning & Team Collaboration

TEXTBOOK AND SUPPLIES |

- TEXT: Game Development Essentials: Game Project Management, Hight & Novak, ISBN 10 1-4180-1541-5
- 11X14 Acid Free Sketchbook (Perforated pages and ring bound)
- #2 Pencils
- 3 - 5 Ebony Drawing Pencils
- Blank CD-R's/DVD-R's
- Jump Drive or External Hard Drive (Buy the most space you can afford)
- Headphones (No longer offered in Lab)

SCAN SKILLS |

The Secretary's Commission on Achieving Necessary Skills (SCANS) was appointed by the Secretary of Labor to determine the skills people need to succeed in the world of work. Richland College is determined to prepare you with the knowledge and skills you need to succeed in today's dynamic work environment. Towards this goal, these workplace competencies and foundation skills have been designed into the curriculum for this course:

- **Speaking:** organize ideas and communicate orally.
- **Sociability:** demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
- **Money:** Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
- **Work with Diversity:** work well with men and women from diverse backgrounds.
- **Understand Systems:** know how social, organizational, and technological systems work and operate effectively with them.

REQUIRED LAB |

Students are required to spend at least **One** extra hour per week outside of class working on student projects. However, I encourage you to work more in order to practice and experiment with your work. Lab assistants and faculty are in the lab to answer questions, however tutoring is not available in the lab.

LAB |

Phone (972-238-6001)

Hours for the Spring semester are:

- Monday – Thursday: 9:00 am to 9:45 pm
- Friday: 9:00 am to 4:45 pm
- Saturday: 12:00 pm to 4:45 pm

NOTE | *All ISGT & Multimedia (credit and continuing education) students must show a Student ID Card to use the lab and check out any equipment. IDs are available at the Student ID Office, T141.*

COURSE OUTLINE |

Cheating will not be tolerated. Integrity and honesty is everything!

This course is divided into Exercises, Projects and Portfolio Development.

Part One | Exercises 40%

Exercises will be completed outside of class. (Exercise Due dates provided by the instructor).

Part Two | Projects & Juries 40%

The projects are designed to develop and challenge your conceptualization, art, design and storytelling skills. You will be provided an objective sheet for each project detailing directives, learning outcomes, resources, due dates and grading rubrics. Your project grade will be determined by formal jury participation, creativity and craftsmanship.

Part Three | Portfolios 20%

A portfolio of your work will be required throughout the semester. You are responsible for the organization and presentation of your portfolio at midterm and at the end of the course. Your portfolio will count as your mid term and final exam. Keep your work in order at all times. A grading rubric will be provided by the instructor for each project.

GRADING PROCEDURE |

A = 90-100	Exercises	40%
B = 80-89	Projects & Juries	40%
C = 70 – 79	Portfolio	20%
F = <70		

For every third unexcused absence the student will be lowered ½ letter grade.

See Instructor Attendance Policy.

NOTE: Grade reports are no longer mailed. Convenient access is available online or by telephone. Use your student identification number when you log in to eConnect or call Touch Tone Services.

Web Site address: <http://econnect.dcccd.edu> | **Telephone number:** 972-613-1818

MODULES |

Below you will find six modules listing the learning outcome topics.

LEARNING OUTCOME TOPICS |

MODULE 1 | The History of the Video Game

1. History of the computer game: A.S. Douglas, Ralph Baer & Nolan Bushnell.
2. Industry Cycles: 1972-1976
3. Industry Cycles: 1976-1983
4. Industry Cycles: 1984-1990
5. Industry Cycles: 1990-1994
6. Industry Cycles: 1994-1999
7. Industry Cycles: 2000-2004
8. Industry Cycles: 2005-Present

MODULE 2 | Organization, Concept Development & Planning

1. Definition of Concept
2. Concept Development: Key Questions
3. Concept Team Members, their roles & building a team
4. The Premise: Characters, Goals & Game Philosophy
5. Unique Selling Points (USPs) & Target Customers
6. Intellectual Property: Original vs. Licensed
7. Game Features & Platforms
8. The Business: Development, Marketing & Publishing

MODULE 3 | Developing the Game Design Document (GDD)

1. Game Design Document (GDD)
2. Story, Outline, Plot & Environments
3. Script & Formatting
4. Cinematics: Pre-Rendered vs. In-Game
5. Storytelling & Storyboards
6. Player Types: Traits & Features
7. Gameplay Mechanics: Levels & Interfaces

MODULE 4 | Developing the Technical Design Document (TDD)

1. Architecture: The Technical Design Document (TDD)
2. Coding Standards & Tools
3. Game Engines
4. Risks & Contingencies
5. Third Party Technology Dependencies
6. Security
7. Revision Control
8. Artificial Intelligence (AI)
9. Physics

MODULE 4 CONTINUED...

10. Input/Output (I/O)
11. Media Formats, Hardware Considerations & Graphics
12. Multiplayer & the Internet: Communication Protocol
13. User Interface, Art Tools, Sound & The TDD
14. Research & Development
15. Technical Design Review (TDR) & The Prototype

MODULE 5 | Developing the Art Style Guide

1. Art Style Guide (ASG)
2. Environment & Objects
3. Art Production Pipeline
4. Concept Drawing & Storyboarding Continued
5. Modeling, Animation, Texturing, Lighting & Rendering
6. Sound Design Document

MODULE 6 | Business, Management & the Organization

1. Phases of Game Development
2. Staffing Plan: Roles & Responsibilities Continued
3. Project Schedule
4. Budget

SPRING 2009 ACADEMIC CALENDAR |

<http://www.rlc.dccd.edu/academiccalendar/>

WITHDRAWAL POLICY |

If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar's Office by the semester's withdrawal date. Failure to do so will result in your receiving a performance grade, usually an "F." If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a "W" (Withdraw) in each class dropped.

You may drop a course at the Admissions Office (T170), the Advising Center (T180) or the BTEC Advising Center (T162). Please consult with your instructor if you are thinking of dropping the course.

For more information about drop deadlines, refer to the current printed Credit Class Schedule, contact the Admissions/Student Records office at 972-238-6100 or 6101 (Thunderduck Hall, T170), or contact the division office.

STOP BEFORE YOU DROP!

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop.

You may drop no more than six (6) courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions.

Remember that once you have accumulated six (6) non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access:
<https://www1.dcccd.edu/6drop>

Drop Date |

<http://www.rlc.dcccd.edu/academiccalendar/>

REPEATING THIS COURSE |

Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. See Third Attempt to Enroll in a Course at <http://www.dcccd.edu/thirdcourseattempt/>

ACADEMIC DISHONESTY |

Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion.

As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. <https://www1.dcccd.edu/cat0506/ss/code.cfm>

DISABILITY ACCOMODATION |

Americans with Disabilities Act Compliance: Students requesting accommodations due to the presence of a disability must identify themselves to the instructor **the first week of classes** and provide documentation defining the accommodation needs from the Disability Services Office in Thunderduck Hall, T120.

ATTENTION FINANCIAL AID STUDENTS |

If you are receiving Financial Aid grants or loans, you must begin attendance in all classes. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds. Students who fail to attend or participate after the drop date are also subject to this policy.

CLASSROOM POLICIES & PROCEDURES |

ATTENDANCE POLICY |

While Richland College does not have a formal attendance policy, students are expected to attend class regularly. If you know you will be missing class(es) this semester, please speak to your instructor about day(s) you will be missing so you can receive information on the lesson(s) and assignment(s) you will miss.

If you are unable to attend class for any reason, please email me at JRoden@DCCCD.EDU in advance. Failure to notify your professor of an absence will result in the lowering of your grade by at least ½ letter for every third absence.

Because of all the material covered in class each session the lecture cannot be repeated for those students who show up tardy for class. It is imperative students arrive to class on time and remain in class the entire session each week.

Students who will be absent from class for the observance of a religious holiday will be allowed to makeup examinations or assignments missed that day if their instructors are notified no later than the 15th day of the semester. Please refer to the college catalog Student Obligations - Attending Classes section.

FOOD & DRINK POLICY |

Except where otherwise determined by a faculty member, no eating or drinking is allowed in the classroom.

WEB SERVER POSTING POLICY |

The Richland Student Web Server is open to all users of the World Wide Web. Any information students or instructors place in their files is readable by any user of the World Wide Web.

COMPUTER & INTERNET USE POLICY |

Currently enrolled Richland College students have access to the Multimedia Lab and classroom computers for Multimedia educational and instructional purposes only. Please use the Del Rio Computer Lab for non-multimedia activities.

Students using their own laptops must use the wireless connection in the Thunderduck Hall building and cannot use the Multimedia lab and classroom computer data lines to access the Internet.

You are required to show your Richland Student ID when requested by lab personnel. You are expected to follow lab policies as well as the Student Code of Conduct specified in the catalog.

SAFETY POLICY |

Students should participate in this class in a safe, appropriate manner. We occasionally have to step over cords for the multimedia cart and/or computer equipment. We also need to watch out for boxes and paper, students' backpacks, etc. Students should begin to build good computing habits, designed to prevent eyestrain, carpal tunnel syndrome, etc.

HANDHELD DEVICE POLICY |

Please have the respect to silence your mobile devices during class. At no time may a student conduct a phone conversation in class or send text messages. If it is an emergency, please exit the room. NOTE: Instruction will not be repeated for those who choose to leave the room for any reason. Students who choose to surf the internet, play games or conduct business other than what is class related will result in the lowering of their final grade by one full letter.

END OF CLASS PROCEDURE |

When you leave class for the day,

1. Delete all your files from your workstation and empty the trash.
2. Shut down your computer using Windows Shut Down.
3. Turn off your monitor after computer has COMPLETELY shut down.
4. Pick up and throw away any trash around your seat.

ATTENTION CONTINUEING EDUCATION STUDENTS |

To receive a certificate for this course, you must make a grade of "C" or higher as a final grade. A grade average of 69% or lower is failing. Continuing Education will not mail your certificate to you. If you do not receive your certificate the last day of class you will have to pick up your certificate at the Continuing Education Front Desk, T160.

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Student Acknowledgement

Read and sign this page and turn it in to your instructor within the first week.

I _____, have read the syllabus and fully understand what is required of me in this course. I have had the opportunity to ask the instructor questions about the syllabus.

Course Name

Course Number and Section

Student Signature

DATE _____

Student Name (please print)

Instructor Signature

DATE _____