

GAME DESIGN PRACTICE 2 (GDP2)

COURSE NUMBER: DIG4715C	CREDIT HOURS: 3.0
SEMESTER/YEAR: SPRING 2016	CLASS LOCATION: OORC, NORMAN (NRG) 0120
	CLASS MEETING TIME(S): M 11:45-1:40/W:12:50-1:40
INSTRUCTOR: Seunghyuk (David) Jang	OFFICE HOURS: Thursday 4:00 – 6:00 pm /NRG 118
CONTACT PHONE: 352-294-2000	CONTACT EMAIL: hyuk@digitalworlds.ufl.edu
COURSE TA OR COORDINATOR: TBA	COURSE WEBSITE: http://lss.at.ufl.edu

COURSE COMMUNICATIONS: Students can communicate directly with the instructor regarding the course material in-class or through CANVAS. Students are also encouraged to post general questions to the discussion board through CANVAS, the course management system.

REQUIRED SOFTWARE AND TOOLS:

- Unreal Engine 4.10.x (Free version) [DOWNLOAD](#)
- Autodesk Maya 2016 (Educational version is free for students) [DOWNLOAD](#)
- Adobe Photoshop CS6/CC
- Adobe After Effects CS6/CC
- Webcam setup (ONLINE students only)
- Two-monitor setup for software instruction (ONLINE students only)
- Edited lectures will be available for your viewing within 24-48 hours after the end of the each of class meetings on Mon and Wed (ONLINE students only)

RECOMMENDED TEXTS AND ONLINE RESOURCES:

- Unreal Engine 4 [Documentation](#)
- Lynda.com, Online tutorial (*FREE access for UF students*)

COURSE DESCRIPTION:

This course elaborates on the game design concepts, process, and technical practices introduced in DIG3713C: “Game Design Practices I.” Students will learn how to use these fundamentals of game design to craft effective digital games with one of the industry standard real-time game engine.

As such, this course is built around,

- a) The detailed examination of specific techniques in game design and their use in digital arts and sciences (DAS) design practice,
- b) A comparative introduction of different frameworks for the game design process, and
- c) An introduction to the technical components of 2D and 3D game design.

PREREQUISITE COURSE: Game Design Practice 1 (DIG3713C)

PREREQUISITE KNOWLEDGE AND SKILLS: Autodesk Maya 2016, Adobe Photoshop

COURSE GOALS AND/OR OBJECTIVES: By the end of this course, students will be able to:

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1. Understand and articulate the foundations of game design as they are accepted within the game industry.
2. Identify specific game design principles like dynamics, system balance, long-and short-term goals, emergent complexity, player flow state, and the “magic circle”, and then leverage these concepts in design practice.
3. Communicate an understanding of specific kinds of process frameworks for game design like rapid prototyping, agile development and personal software process (PSP).
4. Create a functional prototype using High-end Game Engine tool like Unreal Engine.

COURSE SCHEDULE:

The course incorporates lecture, in-class exercises and assignments to apply and reinforce skills learned. Additionally, students will be asked to participate in weekly online critiques to strengthen their skills in analysis and critical thinking. Individual assignments will be explained in detail as the course progresses.

The **FINAL EXAM TIME SCHEDULED FOR THIS COURSE** will be announced in advance of each semester by the University of Florida Registrar’s Office at <http://www.isis.ufl.edu>

Final Presentation Date: April 20th

Online students must write a review on the Canvas for receive the full points.

Week	Class Topics + Objectives	Assignments + Readings
1	Course Objectives Overview of course and objectives Reviews : Fundamentals of Game Design Reviews : Overall plan for the semester	Review the course syllabus and discuss the fundamental of game design
2	Introduce to the Unreal Engine 4 <ul style="list-style-type: none">• Background/History• Interface• Basic GUI and Viewport	Assignment 1: Download and Install the game engine. Getting used to the interface.
3	Basics of Level Design <ul style="list-style-type: none">• Blocking Stage with BSP Brushes Holiday Jan 18th (Monday)	Assignment 2: Prototyping with BSP Brushes.
4	Basics of Level Design <ul style="list-style-type: none">• Use of Static Mesh• Basics of Material	
5	Static Mesh with Maya <ul style="list-style-type: none">• Import/Export Assets• Optimizing Mesh• Background Mesh	Assignment 3: Replace BSP to Static Mesh

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6	Basics of Lighting <ul style="list-style-type: none"> • Realistic Sky/Directional Lights • Lighting Function 	Assignment 4: Apply lights for Indoor and Outdoor
7	Basics of Landscape <ul style="list-style-type: none"> • Adding Foliage • Sculpting tools 	Assignment 5: Add a landscape for your scene
8	Unreal Engine Blueprint Part I <ul style="list-style-type: none"> • Material editor basics • Martinee (Cinematics) 	Assignment 6: Create an interactive door using blueprint
SPRING BREAK (Feb 27th ~ Mar 6th)		
9	Unreal Engine Blueprint Part II <ul style="list-style-type: none"> • Importing Characters • Animation 	Assignment 7: Adding (Replacing) a character for your scene
10	Unreal Engine Blueprint Part III <ul style="list-style-type: none"> • Obstacle • Switches • Adding weapons for the character 	Assignment 8: Adding a moving platform using Martinee function
11	Get ready for the Final project <ul style="list-style-type: none"> • HUD for camera 	Assignment 9: Final Project Proposal
12	Final Project Proposal Review <ul style="list-style-type: none"> • Interaction with object • Particles in Unreal Engine 	Assignment 10: Block out your final project scene
13	Final Project Progress Review <ul style="list-style-type: none"> • Creating a cut scene 	
14	Final Project Progress Review <ul style="list-style-type: none"> • Create a title page using Blueprint 	Assignment 11: Final Project Progress
15	FINAL PROJECTS DUE	

EVALUATION OF GRADES

Assignment	Percentage of Grade
Class Attendance and Participation – Students are expected to actively participate in class discussions, both in class as well as in class online forum. Each student will be required to post a weekly critique of their classmates’ work on CANVAS. (Peer Reviews will be included here)	10%
Weekly Assignments – Weekly assignments are due the first session of each week unless otherwise noted. The work will be uploaded to CANVAS prior to the beginning of class otherwise the work will be considered late.	55%

Final Project – Final Project is the final result of the semester long effort in learning. It is expected that in this final project, students employ the principles and techniques they have learned during the semester.	35%
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GRADING SCALE:

Letter Grade	% Equivalency	GPA Equivalency
A	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
B	84 – 86%	3.00
B-	80 – 83%	2.67
C+	77 – 79%	2.33
C	74 – 76%	2.00
C-	70 – 73%	1.67
D+	67 – 69%	1.33
D	64 – 66%	1.00
D-	60 – 63%	.67
E, I, NG, S- U, WF		0.00

More information on grades and grading policies is here:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

COURSE POLICIES:

ATTENDANCE POLICY:

We value **participation** more than mere **attendance**. Each instructor is responsible for communicating the specific details of what percentage of your grade (if any) will be assigned to participation, and how will class participation be measured and graded. (See Evaluation of Grades section for more detail)

MAKE-UP POLICY:

Presentations may not be presented late. Documented emergencies or medical situations may be the only accepted reasons for an excused absence on the day of a presentation.

COURSE TECHNOLOGY: The students will be required to have access to, and use a personal computer with the access to the Internet. Word editing software will be required for written assignments.

UF POLICIES:

ACADEMIC INTEGRITY:

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As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”* It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>

CLASS DEMEANOR:

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT:

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

NETIQUETTE: COMMUNICATION COURTESY:

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at: <http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

ONLINE COURSE EVALUATIONS:

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

GETTING HELP

For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.