

GAME DESIGN PRACTICES (GDP)

COURSE NUMBER: DIG3713A	INSTRUCTOR: HEITZMAN
SEMESTER/YEAR: FALL/2019	OFFICE LOCATION/HOURS: NRG 116 WED 3:00 PM – 4:00 PM
CREDIT HOURS: 3	CONTACT EMAIL: NICK@DIGITALWORLDS.UFL.EDU
CLASS LOCATION: NRG 120 ORC	CONTACT PHONE: (352) 294-2000
CLASS MEETING TIME(S): MON 3:00 PM – 4:55 PM, WED 4:05 PM – 4:55 PM	COURSE WEBSITE: elearning.ufl.edu

COURSE DESCRIPTION

Game Design Practices is engineered to equip the students with the basic technical knowledge and skills in the field of design, conceptualization, and visualization for game production. Students will learn to work within multiple disciplines within the game industry in order to develop a general understanding of the integral pipelines and processes. Through a carefully crafted set of assignments which build upon each other, the course simulates an accurate development environment in video game production.

PREREQUISITE KNOWLEDGE AND SKILLS

BA in DAS or Written Consent of Instructor

PURPOSE OF COURSE

The purpose of this course is to introduce the students to the game industry design practices involved with game production.

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

1. Concept and plan the systems, design, and visual aesthetics for a 2D/2.5D video game.
2. Develop a game-industry standard game design document (GDD).
3. Introduce complex game design principles and their integration with gameplay.
4. Effectively implement core principles of the game design production process: Planning, execution, scope, testing, and iteration.
5. Create a final build of the video game including all screens and levels in a cohesive package.

COURSE SCHEDULE:

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.registrar.ufl.edu/soc/>

Final Presentation Date: WEDESDAY DECEMBER 11 2019

Module	Topic	Assignments
0	Introduction a. LINK – Syllabus	IN CLASS – Readiness

	b. LINK – Course Links c. EXERCISE – Operation Overview d. EXERCISE – Photoshop e. EXERCISE – Unity f. EXERCISE – Design Architecture	<i>(Setting up Photoshop and Unity for game development; introduction to game development)</i>
1	Reconnaissance a. LINK – Five Major Milestones of Game Development b. EXERCISE – Student Games <i>(previous student games review x3)</i> c. EXERCISE – Pro Games <i>(2D/2.5D released and successful titles discussion x3)</i> d. EXERCISE – Pipeline and Process <i>(development pipeline overview; pre-production through release)</i>	MISSION – Schedule <i>(assignment; build your pipeline milestone schedule using course Final as release date and going backwards to today – template provided)</i>
2	Documentation a. LINK – How to Write a Great Game Design Document (GDD) b. EXERCISE – Documentation <i>(review previous student and industry GDD examples)</i> c. EXERCISE – GDD <i>(example GDD exercise)</i>	MISSION – GDD <i>(version 1.0 of your game’s GDD – template provided)</i>
3	Avatar a. LINK – Creating a 2D Game Character b. LINK – Simple 2D Character Animation c. EXERCISE – Character Silhouettes <i>(character silhouette lecture)</i> d. EXERCISE – Creating a Player Character Sprite <i>(Photoshop Player Character sprite and color palette created; Idle and Walk animation sprite sheets exercise)</i> e. EXERCISE – Unity Player Character Set-up <i>(Player Character creation and testing in Unity)</i>	MISSION – Player <i>(Player animation sprite sheet submission)</i>
4	Interface a. EXERCISE – Design Conveyance <i>(visual design review; establishing the user experience (UX))</i> b. EXERCISE – On Screen <i>(Heads-up Display (HUD) design exercises, user interfaces (UI))</i> c. Covert EXERCISE – Covert Delivery <i>(player feedback through gameplay discussion)</i>	MISSION – Interface <i>(GDD update of UI/UX plans; screenshot of preliminary UI in game)</i>
5	PROTOTYPE MILESTONE a. EXERCISE – PROTOTYPE MILESTONE <i>(rough map to level gameplay exercise)</i>	MISSION – PROTOTYPE MILESTONE <i>(2 screenshots in editor of</i>

	<ul style="list-style-type: none"> b. EXERCISE – Health (<i>game health and hazard systems design</i>) c. EXERCISE – Communication (<i>basic user interface (UI) elements</i>) d. EXERCISE – Physics (<i>physics, moving platforms, activation triggers, teleporters, level changes, anti-gravity mechanics</i>) e. EXERCISE – Modularity (<i>Game build process, packaging, and testing exercise</i>) 	<p><i>your rough game level with all gameplay elements; UI, level flow and mobility, Player spawn and NPC locations, hazards. One screenshot with gameplay flow overlaid with arrows, lines, and text showing expected Player movement and interaction through the level)</i></p>
6	Post-Prototype Evaluation <ul style="list-style-type: none"> a. DEBRIEF – PROTOTYPE MILESTONE Feedback b. EXERCISE – Evaluation (<i>prioritizing bugs and feedback exercises</i>) c. EXERCISE – Aftermath (<i>evaluate the changes and fixes; gameplay improvement evaluation exercise</i>) 	MISSION – Bugs <i>(assignment; short report listing bug fixes and changes implemented with success level; also list of bugs and edits not completed in Campaign)</i>
7	MIDTERM (ALPHA) MILESTONE <ul style="list-style-type: none"> a. LINK – Example GDD updated b. LINK – MIDTERM MILESTONE Requirements c. EXERCISE – Updates (<i>GDD update exercises to include all edits to this point – including anything cut for scope adjusting</i>) 	MISSION – MIDTERM MILESTONE (<i>MIDTERM submission of current GDD and game level build</i>)
8	Post-Midterm Evaluation <ul style="list-style-type: none"> a. DEBRIEF – MIDTERM MILESTONE Feedback b. EXERCISE – Auxiliary (<i>Game Start screen, narrative, transition level development exercises</i>) c. EXERCISE – Consistency (<i>consistent branding; splash screens, buttons, functionality</i>) 	MISSION – Auxiliary (<i>At least 2 screenshots in editor or game build of your auxiliary game levels</i>)
9	Vista <ul style="list-style-type: none"> a. EXERCISE – Monument (<i>points of interest (POI) design exercise</i>) b. EXERCISE – Horizon (<i>skies, backgrounds, parallax development lecture</i>) c. EXERCISE – Impact (<i>lights and lighting solutions, sun rays, particle editor effects; fire, smoke, rain, snow, dust, shadow and contrast</i>) 	MISSION – Vista (<i>1 screenshot in editor or game build demonstrating implementation of lighting, backgrounds, particle effect, and POI placement in your game level</i>)

10	Evolution <ul style="list-style-type: none"> a. EXERCISE – Stages (<i>game level transition design and exercises; advanced strategy and techniques</i>) b. EXERCISE – Stories (<i>advanced narrative and storytelling techniques; overarching gameplay methodology design</i>) c. EXERCISE – Flow (<i>animation polish; secondary character animations, environmental and situational movement and visual cues</i>) 	MISSION – Evolved (<i>GDD update; minimum two polished visuals and/or narrative, design entries</i>)
11	Encounter <ul style="list-style-type: none"> a. LINK – Example GDD updated b. EXERCISE – Bosses (<i>GDD section outlining Boss/epic encounter design</i>) c. EXERCISE – Lairs (<i>using existing assets and level transition knowledge, build a Boss/epic encounter level that connects to the main game level using some design mechanism</i>) 	MISSION – Boss (<i>Updated GDD including the Boss or other epic encounter details</i>)
12	BETA MILESTONE <ul style="list-style-type: none"> a. LINK – Example GDD updated b. LINK – BETA MILESTONE Requirements c. EXERCISE – BETA MILESTONE (<i>Beta Milestone build and GDD update exercise</i>) 	MISSION – BETA MILESTONE (<i>build and parallel updated GDD submissions</i>)
13	Post-Beta Evaluation <ul style="list-style-type: none"> a. DEBRIEF – BETA MISSION Feedback b. EXERCISE – Prioritization (<i>evaluating and prioritizing Beta Milestone feedback into feasibility within schedule constraints</i>) c. EXERCISE – Patches (<i>optional fixes or edits which can fix critical gameplay issues time-efficiently</i>) 	MISSION – Patch (<i>changelist of issues to be addressed, their schedule in relation to the Final submission, and proposed solutions</i>)
14	Packaging <ul style="list-style-type: none"> a. DEBRIEF – Final GDD Feedback b. LINK – Example Game Credits c. EXERCISE – Credits (<i>creating a Credits screen and identifying your roles and any external media (audio, fonts) and assets either used or inspirational in the creation of your game</i>) d. EXERCISE – Icon (<i>game icon design exercise</i>) 	MISSION – Credits (<i>screenshot from game build of your Credits screen and your game icon image</i>)
15	GOLD MASTER MILESTONE <ul style="list-style-type: none"> a. LINK – GOLD MASTER MILESTONE Requirements b. EXERCISE – Group Post-Mortem (<i>post-mortem exercise</i>) 	MISSION – GDD (<i>Final GDD submission</i>)

	c. EXERCISE – GDD Final (<i>final GDD submission</i>) d. EXERCISE – Gold Master Milestone (<i>final game build process and testing exercise</i>)	MISSION – GOLD MASTER MILESTONE (<i>FINAL game build submission</i>)
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REQUIRED TEXTBOOKS, HARDWARE AND SOFTWARE:

- Unity Hub + Unity 2019 [DOWNLOAD](#)
- Adobe Photoshop CC

RECOMMENDED MATERIALS:

- Autodesk Maya
- Lynda.com, Online tutorial (*FREE access for UF students*)
- Official Unity Community <https://unity3d.com/community>
- Autodesk Academy <https://academy.autodesk.com>
- Autodesk Indestructibles Community <https://www.indestructibles.com/howto/games/>
- ArtStation <https://www.artstation.com>
- Digital Graphic Drawing Tablet with Pen (Photoshop compatible)

COURSE FEES:

Course fees are assessed for certain courses to offset the cost of materials or supply items consumed in the course of instruction. A list of [approved courses and fees](#) is published in the Schedule of Courses each semester. (UF-3.0374 Regulations of the University of Florida).

Material and supply and equipment use fee information is available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The total course fee for this class \$0.00

The total course fee for each course is listed on the UF Schedule of Courses.
[\(https://registrar.ufl.edu/soc/\)](https://registrar.ufl.edu/soc/).

EVALUATION OF GRADES

Assignment	Total Points	Percentage of Grade
Participation – Synchronous students are expected to be present and participate in class. Asynchronous students are welcome to actively participate in class discussions. Asynchronous students are expected to review the class recordings in order to complete their assignments.	100	10%
Missions – Mission assignments are due one the date and time indicated by each Canvas assignment. Asynchronous online students, who must wait 24-48 hours for the	400	40%

recorded course lecture to be uploaded, have a 48 hour grace period after the Canvas due date to submit their work – EXCEPT for the Final Project which must be submitted by ALL students on the same day and time.		
MILESTONES – Includes PROTOTYPE, MIDTERM, BETA, FINAL GDD, and GOLD MASTER Milestone submissions.	500	50%

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 – 59%	0.00

More information on grades and grading policies is here:

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

COURSE POLICIES:**PARTICIPATION / 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 class participation will be measured and graded.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

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

In our course, attendance for synchronous students is mandatory. Students are allowed **three unexcused absences**. If you miss more than **three classes** during the semester, each additional absence will lower your overall grade by **100 points**. If you miss more than **six classes**, you will fail the course. Exempt from this policy are only those absences involving university-sponsored events, such as

DIG3713A – GAME DESIGN PRACTICES

athletics and band, and religious holidays, family emergencies, and health issues for which **you must provide appropriate documentation in advance of the absence.**

Additionally, tardiness will not be tolerated. If you are tardy for three class periods, you will receive an unexcused absence.

MAKE-UP POLICY

All projects must be submitted on time. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence as outlined under UF attendance policy:

<https://catalog.ufl.edu/ugrad/1617/regulations/info/attendance.aspx>

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

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

COURSE TECHNOLOGY

The University of Florida and Digital Worlds requires that students have access to and on-going use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Students are required to access electronic forms of information, submit assignments and communicate with other students and faculty electronically. DW requires each student's mobile computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.

DW Computer Requirements

<http://digitalworlds.ufl.edu/programs/ba-in-digital-arts-sciences/new-student-buyers-guide/>

COURSE COMMUNICATIONS

Students can communicate directly with the Instructor regarding the course material through the course management system (CANVAS).

Electronic communication outside class meetings is welcome, however unless absolutely urgent, will be responded to M-F from 9 AM to 5 PM.

When you send an email to your instructor, you should:

- Use the Canvas "Inbox" tool for your course unless you have specific directions otherwise
- Send to the minimum number of necessary recipients
- Use a descriptive subject line
- Be concise and clear
- Use standard file formats for attachments (e.g. PDF, DOCX, XLSX), or confirm that the recipient can open the format you intend to send
- Sign your message with your name and return email address

NOTE ON INSTRUCTION

The course incorporates lecture, in-class exercises, and assignments to apply and reinforce skills learned. Additionally, students will be asked to participate in homework expanding on in-class lessons to strengthen their skills. Individual assignments will be explained in detail as the course progresses.

COURSE TECHNOLOGY SUPPORT:

The [Technology Support Center](http://digitalworlds.ufl.edu/support) provides computer support for Digital Worlds students who access Visimeet, lecture recordings, student equipment, facilities and other technology-based resources. <http://digitalworlds.ufl.edu/support>

For computer assistance related to Visimeet, lecture recordings, student equipment, and facilities request please [Submit a Help Ticket](#) or email support@digitalworlds.ufl.edu.

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the [UF Computer Help Desk](#) available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

UF POLICIES:

UNIVERSITY HONESTY POLICY

UF students are bound by The Honor Pledge that states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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.” The [Honor Code](#) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

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.

STUDENTS REQUIRING ACCOMMODATIONS

Students with disabilities requesting accommodations should first register with the [Disability Resource Center](#) (352-392-8565) 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.

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/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

ONLINE COURSE EVALUATIONS

Students are expected to provide feedback on the quality of instruction in this course by completing [online evaluations](#). 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 [evaluation results](#).

CAMPUS RESOURCES

HEALTH AND WELLNESS

U Matter, We Care

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392- 1575 so that a team member can reach out to the student.

Counseling and Wellness Center

<http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>

ACADEMIC RESOURCES

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

<http://www.crc.ufl.edu/>

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

<http://teachingcenter.ufl.edu/>

DIG3713A – GAME DESIGN PRACTICES

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.
<http://writing.ufl.edu/writing-studio/>

Student Complaints Campus:
https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

On-Line Students Complaints:
<http://www.distance.ufl.edu/student-complaint-process>

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.