

# DIG2632 Creating Mobile Games

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**Instructor**

Nick Heitzman

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Canvas Mail

**Office Location**

NRG 102

**Office Hours**

T 2 – 3 PM

**Course Number**

DIG2632

**Semester/Year**

Fall 2021

**Course Credits**

3 credits

**Course Location**

Online

**Course Description**

Develops appreciation and basic fluency in the application of visual and design literacy into emergent forms of digital media. Historical and theoretical perspectives inform hands-on learning across topics including pre-visualization and storyboarding in static and time-based media, and the critical analysis of contemporary and iconic visual storytelling.

**Pre-Requisite Knowledge and Skills**

None

**Objectives: By the end of this course, students will be able to:**

- Understand the general work-flow for creating mobile games using industry standard software.
- Define scope for their game by creating a Game Design Document.
- Understand the various types of tools involved in designing a mobile game.

**Required Materials**

- Unity HUB and Unity 2019+ (*Free registration required*)
- Visual Studio (*or similar scripting software*)
- Adobe Photoshop CC or GNU Image Editor

**Recommended Materials**

- Lynda.com Online Unity Tutorials (*Free access for UF students*)
- Official Unity Development Community <https://unity3d.com/community>
- ArtStation <https://www.artstation.com/>
- Sketchfab <https://sketchfab.com/>
- Night in the Woods game <http://www.nightinthewoods.com/>
- Digital Graphic Drawing Tablet with Pen (*Photoshop compatible*)

# Course Schedule

This schedule is only a guide and is subject to change. Unless otherwise indicated, assignments and readings are due the day they are listed on the syllabus, not the following day.

Week	Subject	Assignments Due	Stretch Goal
Week 1	<b>Introduction to Game Development</b> Syllabus Overview Game Genre and Gameplay Brainstorming	None	None
<b>Week 2</b>	<b>Game Design Document (GDD) Creation</b> Aesthetics, Gameplay, and Features Milestones, Scope, Deliverables	<b>GDD V1.0</b>	<b>Player Background Story</b>
Week 3	<b>Level Map Design</b> Unity Editor Basics Rough Gameplay Maps	Rough Level Map	Gameplay Path(s) Overlay
Week 4	<b>Player Character and Animations</b> Assembling the Player 2D Sprite Animations	Player Animations	Player Accessory
<b>Week 5</b>	<b>PROTOTYPE MILESTONE</b> First-pass Gameplay Spaces Active Physics and World Scale, Teleports	<b>PROTOTYPE MILESTONE</b>	<b>None</b>
Week 6	<b>User Interface Development</b> Canvas UI/UX Pipeline Narrative Delivery Options	UI/UX Screenshot	Final UI Mockup + Dialogue
Week 7	<b>Tilemaps, Tilesets, Tile Palettes</b> Grids and Tilemaps Tile Palettes	Tileset Screenshot	Custom Tile Palette
<b>Week 8</b>	<b>MIDTERM MILESTONE</b> Game Build Process Testing and Bug-Fixes	<b>MIDTERM MILESTONE</b>	<b>None</b>
Week 9	<b>Level Transitions and Post-processing</b> Level Indexes and Navigation Post-processing System Exercises	Transition Screenshots	Post-Processing Screenshot
Week 10	<b>Parallax and Lighting</b> Parallax and Layers Hybrid Lighting	Parallax Lighting Screenshot	Particle Effect Screenshot
Week 11	<b>Splash Screen and Icon</b> Splash Screen Development Game Icon Creation	Splash Screen Logo	Game Icon Image
Week 12	<b>Game Start and Credits Screens</b> Game Start Scene Integration Consistent Design	Game Start Screenshot	Game Credits Screenshot
<b>Week 13</b>	<b>BETA MILESTONE</b> Game Build Updates Testing and Bug-Fixes	<b>BETA MILESTONE</b>	<b>None</b>
Week 14	<b>Game Audio</b>	Audio Asset List	None

Week	Subject	Assignments Due	Stretch Goal
	Global and Local Sound Audio Balancing		
Week 15	<b>Play Testing</b> Bug and Issue Priorities Testing Each Other's Games	Gameplay Self-Evaluation	Peer Playtest Report
Week 16	<b>GOLD MASTER MILESTONE</b> Final Game Build	<b>GOLD MASTER MILESTONE</b>	<b>None</b>

## Evaluation of Grades

Assignments	Total Points	% of Grade
PARTICIPATION	100	10
STRETCH GOALS	10	
GAME DESIGN DOCUMENT	50	
ROUGH LEVEL MAP	50	
PLAYER ANIMATIONS	50	
UI/UX SCREENSHOT	50	
TILESET SCREENSHOT	50	40
TRANSITION SCREENSHOTS	50	
PARALLAX + LIGHTING SCREENSHOT	50	
SPLASH SCREEN LOGO	50	
GAME START SCREENSHOT	50	
AUDIO ASSET LIST	50	
GAMEPLAY SELF-EVALUATION	50	
Milestones	Total Points	% of Grade
PROTOTYPE MILESTONE	50	
MIDTERM MILESTONE	100	50
BETA MILESTONE	50	
FINAL PROJECT (GOLD MASTER)	100	

## 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

Letter Grade	% Equivalency	GPA Equivalency
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/UGRD/academic-regulations/grades-grading-policies/>

**Materials and Supply Fees**

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 is \$0.00.

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

## Course Polices

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**Attendance Policy, Class Expectations, and Make-Up Policy**

We value participation more than mere attendance. The 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. Interaction with your peers and the instructor will empower you to greater achievement.

In our course, attendance is taken at the beginning of each class period, and is calculated as the Participation element which makes up 10% of your overall grade. Any unexcused absences are factored into the Participation grade total. Exempt from this policy are only those absences involving university-sponsored events, such as athletics and band, and religious holidays, family emergencies, and health issues for which you must provide appropriate documentation in advance of the absence. All assignments are due by the stated date and time. Late assignments as a result of an unexcused absence may be submitted up to one week after the scheduled due date, incurring a 10% grade penalty.

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

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/UGRD/academic-regulations/attendance-policies/>

**Face-to-Face Instruction**

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.

- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms](#).
  - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies](#).

### 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.

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. Digital Worlds requires each student's laptop computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.

### [DW Technology Requirements](#)

### Course Communications

Students can communicate directly with the instructor regarding the course material through the course management system (CANVAS) using "Canvas Mail".

### Course Recordings

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

## Course Technology Support

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The [Technology Support Center](#) provides computer support for Digital Worlds students who access Zoom, lecture recordings, student equipment, facilities and other technology-based resources.

<http://digitalworlds.ufl.edu/support>

For computer assistance related to Zoon, lecture recordings, student equipment, and facilities request please [Submit a Help Ticket](#) or email [support@digitalworlds.ufl.edu](mailto: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 Computing Help Desk](#) available 24 hours a day, 7 days a week at 352-392-4357 or [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

## UF Policies

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### University Honesty Policy

UF students are bound by The Honor Pledge which 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 (<https://www.dso.ufl.edu/sccr/process/student-conduct-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 who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here to get started with the Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, 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>

### Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

## Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

<http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

## Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. [Click here for guidance on how to give feedback in a professional and respectful manner](#). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [ufl.bluera.com/ufl/](http://ufl.bluera.com/ufl/). [Summaries of course evaluation results are available to students here](#).

## Campus and Academic Resources

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**U Matter, We Care:** If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

**Counseling and Wellness Center:** [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

**Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

**University Police Department:** [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

**UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

**E-learning technical support:** Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

**Career Connections Center:** Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

**Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources.

**Teaching Center:** Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

**Writing Studio:** 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

**Student Complaints On-Campus:** [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

**On-Line Students Complaints:** [View the Distance Learning 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.*

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