

# GAME DESIGN PRACTICES

<b>COURSE NUMBER:</b> DIG3713C	<b>CREDIT HOURS:</b> 3
<b>SEMESTER/YEAR:</b> FALL 2017	<b>CLASS LOCATION:</b> NRG 0120
	<b>CLASS MEETING TIME(S):</b> MONDAY (11:45 AM - 1:40 PM), WEDNESDAY (12:50 PM - 1:40 PM)
<b>INSTRUCTOR:</b> Assoc. Prof. Marko Suvajdžić	<b>OFFICE LOCATION/HOURS:</b> TBA
	<b>CONTACT EMAIL:</b>
<b>CONTACT PHONE:</b> (352) 294-2000	<b>COURSE WEBSITE:</b> <a href="http://elearning.ufl.edu/">http://elearning.ufl.edu/</a>

## COURSE DESCRIPTION

Game Design Practices aims to equip the students with the basic technical knowledge and skills in the field of digital illustration, conceptualization, and visualization for game production. The course reviews the key software suites, their principles and practical application. The course is both theoretical and practical in nature, it heavily focuses on hands-on projects throughout the semester. Students will learn to work within multiple specialties within the game art field in order to build up a general understanding of the pipeline and processes involved. Emphasis is placed on strong foundation skills, compelling conceptual ideas, and self-motivated problem solving. Through a carefully crafted set of assignments, the course simulates the working conditions in video game production.

Online recordings: TBA

Password: TBA

## 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 industry practices in game art production.

## COURSE GOALS AND/OR OBJECTIVES:

At the end of the course, students should be able to:

- Render concept art per assigned brief.
- Render basic environment art.
- Use different perspectives to analyze and investigate events and production cycles in video games production process.
- Effectively implement core principles of the game art production process: brief analysis, rough sketches, concept art, and final art.
- Critically analyze the construction of digital and non-digital games from the game artist perspective.

**COURSE SCHEDULE:**

THERE IS NO FINAL EXAM IN THIS CLASS. INSTEAD, THERE WILL BE A FINAL PROJECT IN LIEU OF THE FINAL EXAM. THE FINAL PROJECT IS DUE ON THE DATE/TIME OF A SCHEDULED FINAL EXAM.

Week	Topic	Assignments
1	<p>Course introduction; Game scene backgrounds (atmosphere, environments, non-interactable); short game design elaboration; design of the following elements:</p> <ul style="list-style-type: none"> <li>• Sky</li> <li>• Clouds and atmospheric effects</li> <li>• Natural landscape elements (mountains, plains, bodies of water, forests, sand dunes)</li> <li>• Urban landscape elements (cityscapes)</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 1: Short game design elaboration; designing three thematically distinct sets of scene background elements, with a unified visual style.</p>
2	<p>Game scene mid-grounds (game world, interactable); design of the following elements:</p> <ul style="list-style-type: none"> <li>• Natural landscape elements (rocks, trees, corals, cliffs)</li> <li>• Urban landscape elements (buildings, rooftops, concrete and metal constructions, metal bars, gates)</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 2 Designing mid-ground elements to complement each of the three previously designed background elements.</p>
3	<p>Game scene foregrounds (non-interactable); designing the following elements close-up:</p> <ul style="list-style-type: none"> <li>• Natural landscape elements (vegetation, rocks, ground mass, mass of water)</li> <li>• Urban landscape elements and mise-en-scene (pillars, non-interactive props)</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 3 Designing foreground elements to complement each of the three previously designed scene elements.</p>
4	<p>Platformer game tiles and building elements:</p> <ul style="list-style-type: none"> <li>• Designing modular elements that can be tiled in order to create scenery</li> <li>• Designing ground tiles, slope tiles, water tiles</li> <li>• Various tile types for greater modularity</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 4 Designing three sets of tile elements for each of the previously designed scene elements.</p>
5	<p>Player character</p> <ul style="list-style-type: none"> <li>• Concept proposal for player character (PC)</li> <li>• Elaboration and final design of player character</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 5 Rough concept design of Player character; design, refinement and final illustration of a selected character concept.</p>
6	<p>Non player characters</p>	<p>Assignment 6</p>

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	<ul style="list-style-type: none"> <li>• Concept proposal for non-player character (NPC)</li> <li>• Elaboration and final design of non-player character</li> </ul> <p>Practical work/Project Review</p>	<p>Concept design of NPC in a unified visual style to complement the design of the PC; design, refinement and final illustration of a selected NPC concept.</p>
7	<p>Props, in game collectable items, vehicles; design of the following elements:</p> <ul style="list-style-type: none"> <li>• Collectable items (health, ammo, upgrades)</li> <li>• Vehicles</li> <li>• Props (weapons, communication devices, protective gear, tools)</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 7 Designing a set of collectable items, vehicles and props according to the game world logic and specific needs of the project.</p>
8	<p>Characters - layer separation for animation</p> <ul style="list-style-type: none"> <li>• Understanding the principles of 2D animation using separate layers</li> <li>• Analysis of animation possibilities for PC</li> <li>• Separation of a character into layers to be used for in-game character animation</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 8 Separation of various animation layers to be used for in game animation of PC. Preparation of PC illustration for in game animation.</p>
9	<p>Player character animation sprite sheet</p> <ul style="list-style-type: none"> <li>• Understanding of sprite sheet format and it's application in game animation</li> <li>• Basic principles of creating an animation sprite sheet for the player character</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 9 Creating three sprite sheets for three chosen in-game player character actions (ducking, walking, jumping, greeting).</p>
10	<p>Player character power up variations</p> <ul style="list-style-type: none"> <li>• Designing visual variations of the player character to illustrate various states of the character (various power-up levels, various fatigue levels)</li> <li>• Designing clear visual feedback of gameplay</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 10 Designing three different player character design states in line with the existing player character design, in line with specific project needs.</p>
11	<p>UI elements; design of the following UI elements:</p> <ul style="list-style-type: none"> <li>• buttons</li> <li>• heads-up display (HUD)</li> <li>• checkboxes</li> <li>• slider bars</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 11 Designing specific UI elements (buttons, HUD, checkbox, slider bar) in line with the overall visual and narrative style of the game.</p>

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12	<p>Particle materials; understanding 2D particle effects, and creating graphics for specific particle systems:</p> <ul style="list-style-type: none"> <li>• Natural particle elements (rain, smoke, fire, snow, dust)</li> <li>• Magical particle elements</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 12 Designing 10 graphics to be used as materials for 2D particle effects, in line with the overall visual style of the game, according to the needs of the project.</p>
13	<p>Menu screens; concept elaboration and design of various special screens:</p> <ul style="list-style-type: none"> <li>• Company splash screen</li> <li>• Game welcome screen</li> <li>• Play with sound screen</li> <li>• Credits screen</li> <li>• Special screens</li> </ul> <p>Practical work/Project Review</p>	<p>Assignment 13 Designing five different special screens, according to the needs of the project, in line with the overall visual style of the game.</p>
14	<p>Icons; the purpose, variations and design of application icons.</p> <p>Practical work/Project Review</p>	<p>Assignment 14 Designing 10 various graphics to be used as application icons for the game project.</p>
15	<p>Art book: collection of artwork, together with explanations, development stages and GDD:</p> <ul style="list-style-type: none"> <li>• Elaboration and purpose of video game project visual style guide</li> <li>• Art book as a form of project portfolio</li> </ul> <p>Practical work/Project Review</p>	<p>Final Project Designing a PDF file to display all of the previously finished specific assignments, their development stages as well as brief game design overview.</p>

**REQUIRED TEXTBOOKS, HARDWARE AND SOFTWARE:**

1. Adobe Photoshop
2. Digital drawing/graphics tablet

**RECOMMENDED MATERIALS:**

1. 3D Total Publishing (2010) **Digital Paintinig Techniques Vol.1**, *3D Total Publishing*
2. 3D Total Publishing (2012) **Beginner's Guide to Digital Painting in Photoshop: Volume 1**, *3D Total Publishing*
3. Gilles Beloeil, AndreiRiabovitchev, Roberto Castro (2013) **Art Fundamentals - Color, Light, Composition, Anatomy, Perspective and Depth**. *3D Total Publishing*
4. K. Daiger (2009) **The Documents and Assets Created During the Video Game Production Process**, *University of Texas, School of Information (PDF)*
5. C. Melissions, P. O'Rourke (2012) **The Art of Video Games: From Pac-Man to Mass Effect**, *Rizolli*
6. C. Solarski (2012) **Drawing Basics and Video Game Art: Classic to Cutting-Edge Art Techniques for Winning Video Game Design**, *Watson-Guptill*
7. A. Galuzin (2016) **Preproduction Blueprint: How to Plan Game Environments and Level Designs**, *CreateSpace Independent Publishing Platform*
8. S. Guenzel (2014) **Push Start: The Art of Video Games**, *Earbooks*
9. S. R. Kennedy (2013) **How to Become a Video Game Artist: The Insider's Guide to Landing a Job in the Gaming World**, *Watson-Guptill*
10. J. Jenisch (2008) **The Art of the Video Game**, *Quirk Books*

**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 \$54.26

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

**EVALUATION OF GRADES**

Assignment	Total Points	Percentage of Grade
Brief game pitch document (txt); Illustration of game scene background elements	50	5%
Illustration of game scene mid-ground elements	50	5%
Illustration of game scene foreground elements	50	5%
Illustration of game scene tile elements	50	5%
Illustration of player character	50	5%

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Illustration of non-player characters	50	5%
Illustration of collectable elements, props, vehicles	50	5%
Player character and non-player character layer separation for animation; animation preview	50	5%
Player character and non-player character animation sprite sheets	50	5%
Illustration of player character state variations	50	5%
User interface design	50	5%
Particle emitter material design	50	5%
Game logo and special screen design	50	5%
Icon and splash screen design	50	5%
Final Project - Game art book and 60 second video presentation of project	200	20%
Participation – Students are expected to actively participate in class discussions. Participation will be measured by the quality of peer reviews (and attendance for on campus students)	100	10%

**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:**

### **PARTICIPATION / ATTENDANCE**

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. Real Time [RT] interaction with your peers and the Instructor will empower you to greater achievement.

### **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 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.

### **COURSE COMMUNICATIONS**

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

### **VIDEO LECTURE CAPTURE**

High-quality video lecture capture of this course is available only for enrolled students. These video captures are edited and posted within 24-48 hours of the class meeting for the benefit of the Your Own Time [YOT] students and to offer the potential for review by on-campus and Real Time [RT] online students. For the on-campus and RT students, watching lectures in lieu of attending and participating in class is NOT acceptable.

Your Instructor will provide you with this semester's login information during the first week of class. It is not permissible to share or distribute video login information to anyone other than officially enrolled students of this course. Lecture videos can be found at <https://vimeo.com/digitalworlds>.

## 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](mailto: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/>

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](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.*