

## ***Theory and Practice of Multimedia Production***

CAP 3020 Section: 11301

***Class Periods:*** T Periods 8-9 (3:00-4:55PM), R Period 9 (4:05-4:55PM)

***Location:*** NRG 0205

***Academic Term:*** Spring 2023

***Last Updated:*** 1/2/2023

### ***Instructor:***

William "Brett" Benda

[brett.benda@ufl.edu](mailto:brett.benda@ufl.edu)

Office Hours: TBD

### ***Teaching Assistants:***

No teaching assistant for this course; contact instructor for course-related inquiries.

### ***Course Description***

Combines the traditional media production pipeline and software engineering processes to synthesize an approach geared for the production of works incorporating both artistic and computational elements.

Students will work in teams using both technical and artistic skills to produce an interactive multimedia experience.

### ***Course Pre-Requisites / Co-Requisites***

Prereq: CAP 3027

### ***Course Objectives***

- Understand the core elements of interactive, multimedia applications
- Go through all stages of software development from design to implementation and testing
- Create design documents and decide on appropriate size and scope of an application
- Work as a member a team on a semester-long project to create a large-scale interactive application
- Create a developer journal to document the development process
- Understand the process of creating software prototypes

### ***Materials and Supply Fees***

No required materials.

### ***Required Textbooks and Software***

The Art of Game Design: A Book of Lenses, Second Edition, J. Schell

ISBN: 978-1466598645

### ***Recommended Materials***

Students are free to choose their own development software, but the followings are suggestions:

- Game Engines: Unity (free), Unreal (free)
- 3D Modeling and Animation: Blender (free), Autodesk Maya (free with student account), Autodesk 3DS Max (free with student account)
- 2D Image Editors: GIMP (free) or Inkscape (free) Adobe Illustrator, Adobe Photoshop
- Video Editors: Adobe Premiere

## Course Schedule

Below is a tentative schedule of topics, activities, and due dates. Tuesdays are typically reserved for project work and other team activities, while Thursday is for lecture. Listed lecture topics are subject to change based on updated team needs, and additional topics may be added based on team need or demand.

	Tuesday	Thursday
Week 1	Syllabus, course introduction Team assignment/icebreaker	Pitch/Design Doc Q&A, Recommended software/technology overview, Intro to Unity
Week 2	Pitch Presentations <b>Due: Pitch Presentation/Deliverables</b>	Into to Unity (continued)
Week 3		More Unity <b>Due: Unity exercise (part 1)</b>
Week 4	<b>Due: Design Document v1</b> <b>Due: Schedule Documents</b>	Iterative design processes, prototyping <b>Due: Unity exercise (part 2)</b>
Week 5		
Week 6		Perception (and deception), 3D depth cues, animations
Week 7		Audio
Week 8		Presentation and communication tips and tricks
Week 9	Midpoint Presentations <b>Due: Midpoint Presentation/Deliverables</b> <b>Due: Midpoint Team Evaluations</b>	
Week 10	<b>Spring Break!</b>	<b>Spring Break!</b>
Week 11		Accessibility in games, gaming in education/other fields <b>Due: Accessibility exercise</b>
Week 12		
Week 13		Game balancing, evaluation methodologies
Week 14		
Week 15		<b>Due: Game balancing exercise</b>
Week 16	Final Presentations <b>Due: Final Presentation/Deliverables</b> <b>Due: Final Team Evaluations</b> <b>Due: Product Trailer Video</b>	<b>Class is over!</b>
Final Exam (5/5)		<b>Due: Worklogs</b> <b>Due: Postmortem</b>

### ***Evaluation of Grades***

<b><i>Assignment</i></b>	<b><i>% of Final Grade</i></b>
<b>Attendance/Participation</b>	<b>5%</b>
<b>Exercises</b>	<b>15%</b>
<b>Project</b>	<b>80%</b>
Pitch Presentation/Deliverables	5%
Schedule Documents	5%
Worklogs	5%
Design Document	15%
Midpoint Presentation/Deliverables	15%
Midpoint Team Evaluations	1%
Final Presentation/Deliverables	20%
Final Team Evaluations	2%
Product Trailer Video	7%
Postmortem	5%

### ***Grading Policy***

<b><i>Percent</i></b>	<b><i>Grade</i></b>	<b><i>Grade Points</i></b>
93.4 - 100.0	A	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	B	3.00
80.0 - 83.3	B-	2.67
76.7 - 79.9	C+	2.33
73.4 - 76.6	C	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

More information on UF grading policy may be found at:

[UF Graduate Catalog](#)  
[Grades and Grading Policies](#)

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

Attendance is expected for class unless otherwise stated. It is vital to attend in order to work with your team and receive feedback from the instructor.

Excused absences must be consistent with university policies in the [Graduate Catalog](#) and require appropriate documentation. Additional information can be found in [Attendance Policies](#).

### ***Students Requiring Accommodations***

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect 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.

### ***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.](#)

### **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](#) 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.

### **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 the [Notification to Students of FERPA Rights](#).

### **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:** [counseling.ufl.edu/cwc](http://counseling.ufl.edu/cwc), and 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** at 392-1111 (or 9-1-1 for emergencies), or [police.ufl.edu](http://police.ufl.edu).

#### **Academic Resources**

**E-learning technical support**, 352-392-4357 (select option 2) or e-mail to [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu).

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

**Library Support**, 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.

**Writing Studio**, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

**Student Complaints Campus**

**On-Line Students Complaints**