

INTERACTION DESIGN

COURSE NUMBER: DIG6126C	INSTRUCTOR: MARKUS SANTOSO
SEMESTER/YEAR: SPRING A 2019	OFFICE LOCATION/HOURS: CSE436 T & TR 10 – 11 AM
CREDIT HOURS: 2.0	CONTACT EMAIL: markus.santoso@ufl.edu
CLASS LOCATION: SAGE	CONTACT PHONE: (352) 294-2000
CLASS MEETING TIME(S): M & W 3 - 4	COURSE WEBSITE: elearning.ufl.edu

COURSE DESCRIPTION

The goal of this class is to explore novel ways to design interaction that seamlessly blends physical, haptic/tactile feedback, and virtual interaction in an augmented or virtual reality project. Through several projects, students will engage a real-world challenge or problem. Students will propose and build an AR/VR experience featuring novel interaction design that solves this problem.

PREREQUISITE KNOWLEDGE AND SKILLS

Admission to MiDAS program or instructor's consent.

PURPOSE OF COURSE

Students will develop an AR/VR project that solves a real-world problem provided by an outside collaborator. They will also explore novel interaction designs for AR/VR projects that seamlessly blend physical, haptic/tactile feedback, and virtual interaction.

COURSE GOALS AND/OR OBJECTIVES:

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

1. Understand the current state of interaction in AR/VR project.
2. Understand the limitations of collaborator's existed project
3. Propose a novel interaction AR/VR project to collaborator
4. Develop an AR/VR project with novel interaction solution
5. Conduct preliminary study of their proposed solution

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 <https://registrar.ufl.edu/soc/>

Week	Topic
1	Class Introduction and Kickoff Meeting with Project Collaborator
2	Literature Study and Project's Presentation
3	Project Development 1
4	Project Development 2

5	Check Point
6	Project Development 3
7	Project Development 4
8	Final Project

REQUIRED TEXTBOOKS AND SOFTWARE

1. Required Software:

- Unity3D
- AR/VR SDK or Plugin: Vuforia, ARKit/ARCore, Oculus SDK, Vive SDK

RECOMMENDED MATERIALS

Textbooks:

- *Emerging Technologies of Augmented Reality: Interfaces and Design*. Michael Haller and Bruce Thomas
- *A Survey of Augmented Reality*. Mark Billinghurst and Adrian Clark
- *Augmented Reality: An Emerging Technologies Guide to AR*. Greg Kipper and Joseph Rampolla
- *The VR Book: Human-Centered Design for Virtual Reality*. Jason Jerald

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 is \$0.0

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
<i>Check Point</i>	<i>45</i>	<i>45%</i>
<i>Final Test</i>	<i>50</i>	<i>50%</i>
<i>Participation – Students are expected to actively participate in class discussions</i>	<i>5</i>	<i>5%</i>

GRADING SCALE

Letter Grade	% Equivalency	GPA Equivalency
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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 will class participation be measured and graded.

MAKE-UP POLICY

- At the sole discretion of the instructor, Exams may or may not be taken late. Documented Emergencies or medical situations may be the only accepted reasons for an excused absence on the day of an exam.
- Any assignment turned in past the due date may lose up to 10% of the total point value of the assignment for each class day it is late.

ASSIGNMENT POLICY

- At the sole discretion of the instructor, late work may be penalized according to the late policy.
- Any assignment turned in past the due date may lose up to 10% of the total point value of the assignment for each class day it is late.

COURSE COMMUNICATIONS

Students can communicate directly with the Instructor regarding the course material through UF e-Learning. <http://elearning.ufl.edu/>

COURSE TECHNOLOGY

The students are required to bring their own laptop (Windows, OSX) during classes.

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 (<https://www.dso.ufl.edu/sccr/process/student-conducthonor-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, 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.

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 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/>.

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/>

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.