

## Cover Sheet: Request 15873

### CAP 4XXX – VR for the Social Good

#### Info

Process	Course New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Benjamin Lok lok@ufl.edu
Created	2/22/2021 12:00:32 AM
Updated	3/18/2021 3:42:39 PM
Description of request	Requesting adding the course VR for the Social Good as an undergraduate course. The course has been successfully taught as a special topics course.

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Computer and Information Science and Engineering 19140000	Christina Gardner-McCune		3/1/2021
No document changes					
College	Conditionally Approved	ENG - College of Engineering	Heidi Dublin	<p>Course descriptions should not start with “this course”</p> <p>Course is listed as repeatable for credit. Why? Is there different contents the next time? Or is this a mistake?</p> <p>A 4000 level course must have a prereq. This could be something like Junior or above or EG junior, etc. If this is not desired, 2000 level would be more appropriate.</p> <p>Graduate syllabus should be attached for comparison as this is a joint submission</p> <p>Undergraduate syllabus must refer to the undergraduate attendance policy text</p> <p>Correct the top part of the syllabus for course # and class times</p> <p>Syllabi—In week 9—‘assigned’ might be a typo</p> <p>Under grading—check evaluation being done by product owners and teammates at 60%</p> <p>Please send back with corrections by 3/12/2021 for Faculty Council to review on 3/18</p>	3/5/2021
No document changes					
Department	Approved	ENG - Computer and Information Science and Engineering 19140000	Christina Gardner-McCune	All requested changes were made and reviewed.	3/15/2021

Step	Status	Group	User	Comment	Updated
VR for the Social Good Syllabus (Undergraduate)_v2.docx.pdf					3/15/2021
VR for the Social Good Syllabus (Graduate) v2.docx.pdf					3/15/2021
College	Approved	ENG - College of Engineering	Heidi Dublin	Approved by HWCOE Curriculum Committee and Faculty Council.	3/18/2021
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			3/18/2021
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

# Course|New for request 15873

## Info

**Request:** CAP 4XXX – VR for the Social Good

**Description of request:** Requesting adding the course VR for the Social Good as an undergraduate course. The course has been successfully taught as a special topics course.

**Submitter:** Christina Gardner-McCune gmccune@ufl.edu

**Created:** 3/15/2021 10:38:40 AM

**Form version:** 7

## Responses

### Recommended Prefix

*Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.*

Response:  
CAP

### Course Level

*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.).*

Response:  
4

### Course Number

*Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.*

Response:  
XXX

### Category of Instruction

*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.*

Response:  
Advanced

- 1000 level = Introductory undergraduate
- 2000 level = Introductory undergraduate
- 3000 level = Intermediate undergraduate
- 4000 level = Advanced undergraduate
- 5000 level = Introductory graduate
- 6000 level = Intermediate graduate
- 7000 level = Advanced graduate
- 4000/5000= Joint undergraduate/graduate
- 4000/6000= Joint undergraduate/graduate

*\*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Council)*

**Lab Code**

Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:

None

**Course Title**

Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles.&nbsp;

Response:

Virtual Reality for the Social Good

**Transcript Title**

Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:

VR for Social Good

**Degree Type**

Select the type of degree program for which this course is intended.

Response:

Baccalaureate

**Delivery Method(s)**

Indicate all platforms through which the course is currently planned to be delivered.

Response:

On-Campus, Online

**Co-Listing**

Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:

Yes

**Co-Listing Explanation**

Please detail how coursework differs for undergraduate, graduate, and/or professional students. Additionally, please upload a copy of both the undergraduate and graduate syllabus to the request in .pdf format. For more information please see the [Co-Listed Graduate Undergraduate Courses Policy](#).

Response:

While the lectures and the general structure of assignments #1-3 are similar for undergraduate and graduate students, graduate students have greater project requirements including larger user

testing requirements, additional meeting and reporting requirements, and requirements to integrate research results in their projects than undergraduate projects. In particular, assignment #4 - Applying Social virtual storytelling experience to address a social good - 60% requires graduate students to routinely test and evaluate their platform with clients and users. Graduate students will conduct multiple social sessions with large numbers of end users to impact the social good. While undergraduates are only required to develop and iterate on the application with a relatively small number of users.

Thus, project descriptions and evaluation rubrics for undergraduate and graduate student project submissions will differ significantly.

**Effective Term**

*Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.*

Response:  
Earliest Available

**Effective Year**

*Select the requested year that the course will first be offered. See preceding item for further information.*

Response:  
Earliest Available

**Rotating Topic?**

*Select "Yes" if the course can&nbsp;have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.*

Response:  
No

**Repeatable Credit?**

*Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this&nbsp;in the question above.*

Response:  
No

**Amount of Credit**

*Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.*

Response:

**S/U Only?**

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:

No

**Contact Type**

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:

Regularly Scheduled

- Regularly Scheduled [base hr]
- Thesis/Dissertation Supervision [1.0 headcount hr]
- Directed Individual Studies [0.5 headcount hr]
- Supervision of Student Interns [0.8 headcount hr]
- Supervision of Teaching/Research [0.5 headcount hr]
- Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

**Weekly Contact Hours**

Indicate the number of hours instructors will have contact with students each week on average throughout the duration of the course.

Response:

3

**Course Description**

Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines.

Response:

A multidisciplinary approach to solving pressing social problems by blending social science practices with innovative technology. Students will explore effective messaging perspectives, virtual social spaces, and virtual reality technologies to create a compelling story for a social good issue. This class is for all students, regardless of major or prior experience.

**Prerequisites**

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to

target the appropriate audience for the course.  
Courses level 3000 and above must have a prerequisite.  
Please verify that any prerequisite courses listed are active courses.

Response:  
Junior or above

Completing Prerequisites on UCC forms:

- Use “&” and “or” to conjoin multiple requirements; do not use commas, semicolons, etc.
- Use parentheses to specify groupings in multiple requirements.
- Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, “MAC 2311(B)” indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
- Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
- “Permission of department” is always an option so it should not be included in any prerequisite or co-requisite.
- If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY\_BS, undergraduate Disabilities in Society minor = DIS\_UMN)

Example: A grade of C in HSC 3502, passing grades in HSC 3057 or HSC 4558, and undergraduate PBH student should be written as follows: HSC 3502(C) & (HSC 3057 or HSC 4558) & UGPBH  
&nbsp;

### Co-requisites

Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:  
none

### Rationale and Placement in Curriculum

Explain the rationale for offering the course and its place in the curriculum.

Response:  
As immersive technologies (virtual, mixed, and augmented reality) proliferate, students need to learn 1. how to develop systems that use immersive technologies, 2. what types of problems are best suited for immersive technologies, 3. storytelling strategies around messaging and persuasion. This course provides students an introduction to the design of immersive experiences, including covering commonly used commodity hardware and software platforms. Students also learn messaging strategies so as to understand how to create effective immersive experiences for persuasion. Finally, students apply the system design and messaging concepts through developing solutions to address social good issues as operationalized by sustainable development goals (e.g., United Nations Sustainable Development Goals)

### Course Objectives

Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:  
The Virtual Reality (VR) for the Social Good course will have students learn the basics of message effects and how to apply these components effectively in virtual 3D social spaces, and develop virtual experiences to improve the social good. Students will create and deliver compelling interactive stories in virtual social spaces. The virtual social spaces will motivate participants to participate in improving the social good. Virtual social spaces will be iterated upon throughout the semester incorporating planning, development, deployment, and feedback with

end-users. Undergraduate students are expected to routinely test their platform with clients and users. Undergraduate students will conduct multiple social sessions with small groups of end-users to impact the social good.

### **Course Textbook(s) and/or Other Assigned Reading**

*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. &nbsp;Please provide specific examples&nbsp;to evaluate the course and identify required textbooks.&nbsp;*

Response:

There are no required textbooks. Lecture notes will be provided by the instructors. The software we will use in this class is Mozilla Hubs. Mozilla Hubs is an open-source platform to create virtual experiences on a variety of platforms. Mozilla Hubs is free to use.

### **Weekly Schedule of Topics**

*Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.*

Response:

Week 1: Introduction to Course, Messaging, and VR, Benjamin Lok and Sriram Kalyanaraman / Assignment #1: Critique Solo VR Experience Assigned, Assignment #2: Create Solo VR Experience Assigned

Week 2: Science of Empathy, Benjamin Lok and Sriram Kalyanaraman

Week 3: VR: What, When, Why, Benjamin Lok and Sriram Kalyanaraman, / Assignment #1: Critique Solo VR Experience Due

Week 4: VR: What, When, Why, Benjamin Lok and Sriram Kalyanaraman

Week 5: Science of Persuasion and Call to Action!, Benjamin Lok and Sriram Kalyanaraman / Assignment #3: Critique Social VR Experience Assigned, Assignment #4: Create Social VR Experience Assigned

Week 6: Power of Iteration, Benjamin Lok and Sriram Kalyanaraman / Assignment #2: Create Solo VR Experience Due,

Week 7: Science of Persuasion (cont'd), Benjamin Lok and Sriram Kalyanaraman

Week 8: Power of Iteration (cont'd), Discuss class project, Benjamin Lok and Sriram Kalyanaraman

Week 9: Research into using VR for Social Good, Benjamin Lok and Sriram Kalyanaraman / Assignment #3: Critique Social VR Experience due

Week 10: Evaluating Efficacy in VR, Benjamin Lok and Sriram Kalyanaraman

Week 11: Review Iteration #1 for all teams, Benjamin Lok and Sriram Kalyanaraman

Week 12: VR Hardware and Software, Benjamin Lok and Sriram Kalyanaraman

Week 13: Review Iteration #2 for all teams, Benjamin Lok and Sriram Kalyanaraman

Week 14: Future of Immersive Storytelling, Benjamin Lok and Sriram Kalyanaraman

Week 15: Demo Day! (Review Iteration #3), Benjamin Lok and Sriram Kalyanaraman, / Assignment #4: Create Social VR Experience due

### **Grading Scheme**

*List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details &nbsp;regarding how those items will be assessed.*

Response:

The course has four assignments.

Assignment #1 - Critique a Solo VR experience - 10% of final grade

Students will critique effective virtual storytelling experiences. Students will evaluate a VR



experience and provide a critical review of the experience by leveraging an formal critique framework.

**Assignment #2 - Build a Solo virtual storytelling experience - 20% of final grade**

Students learn the skills needed to build a VR experience. Students will use a commercial 3D social space platform and learn how to use 3D virtual social spaces to address the social good. Students will learn to incorporate 2D and 3D content into a scene. Students deploy the scene to the public. Students apply this knowledge to a self-generated project to create an experience to message positive change for the social good. Grading will be focused on effective identification of a non-profit organization that works on UN Sustainable Development Goals, the effective conversion of the organization's message into a virtual reality experience as to persuade users to act on the UN Sustainable Development Goal.

**Assignment #3 - Critique a Social VR experience - 10% of final grade**

Students will critique effective social virtual storytelling experiences. Students will evaluate a VR experience and provide a critical review of the experience by leveraging an formal critique framework.

**Assignment #4 - Build a Social virtual storytelling experience to address a social good - 60% of final grade**

Students form teams and work on projects pitched to. Students will use the Agile software development method to deliver value to the UF community. Virtual social spaces will be iterated upon throughout the semester incorporating planning, development, deployment, and feedback with end users. Students will test and evaluate their platform with clients and users. Graduate students will conduct several social sessions with several end-users to impact the social good.

Grading is as follows:

40% team follows Agile processes and Scrum ceremonies (evaluated through submission of documentation)

60% evaluation of student's contribution by product owners and teammates using rubrics designed by the instructors.

There is no final exam.

### **Instructor(s)**

*Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.*

Response:

Benjamin Lok

Sriram Kalyanaraman

### **Attendance & Make-up**

*Please confirm that you have read and understand the University of Florida Attendance policy.*

*A required statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.*

*• 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>.*

Response:

Yes

## Accommodations

Please confirm that you have read and understand the University of Florida Accommodations policy.

A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

- Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://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.

Response:

Yes

## UF Grading Policies for assigning Grade Points

Please confirm that you have read and understand the University of Florida Grading policies.

Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

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

Response:

Yes

## Course Evaluation Policy

Course Evaluation Policy

Please confirm that you have read and understand the University of Florida Course Evaluation Policy.

A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

- Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/public-results/>. 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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

&nbsp;

Response:

Yes

## ***VR for the Social Good***

CAP 5XXX

***Class Periods:*** Tuesdays, 7th-9th periods, 1:55 PM - 4:55 PM

***Location:*** virtual

***Academic Term:*** Fall 2020

### ***Instructor:***

Benjamin Lok

[lok@ufl.edu](mailto:lok@ufl.edu)

352-214-9829

Office Hours: Tuesday, 6th period, 12:50 PM - 1:40 PM, virtual meetings

Sriram Kalyanaraman

[sri@jou.ufl.edu](mailto:sri@jou.ufl.edu)

919-923-6837

Office Hours: Tuesdays, by appointment

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

Please contact through the Canvas website

- Jacob Stuart, Name of TA, email address, office location, office hours

### ***Course Description***

A multidisciplinary approach to solving pressing social problems by blending social science practices with innovative technology. Students will explore effective messaging perspectives, virtual social spaces, and virtual reality technologies in order to create a compelling story on a social good issue. This class is for all students, regardless of major or prior experience. NO programming experience is required.

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

None

### ***Course Objectives***

The Virtual Reality (VR) for the Social Good course will have students learn the basics of message effects and how to apply these components effectively in virtual 3D social spaces, and develop virtual experiences to improve the social good. Students will create and deliver compelling interactive stories in virtual social spaces. The virtual social spaces will motivate participants to participate in improving the social good. Virtual social spaces will be iterated upon throughout the semester incorporating planning, development, deployment, and feedback with end users. Graduate students are expected to routinely test and evaluate their platform with clients and users. Graduate students will conduct multiple social sessions with large numbers of end users to impact the social good.

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

none.

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

There are no required textbooks. Lecture notes will be provided by the instructors. The software we will use in this class is Mozilla Hubs. Mozilla Hubs is an open-source platform to create virtual experiences on a variety of platforms. Mozilla Hubs is free to use.

### ***Recommended Materials***

none.

### ***Course Schedule***

Week 1: Introduction to Course, Messaging, and VR, Benjamin Lok and Sriram Kalyanaraman / Assignment #1: Critique Solo VR Experience Assigned, Assignment #2: Create Solo VR Experience Assigned

Week 2: Science of Empathy, Benjamin Lok and Sriram Kalyanaraman  
Week 3: VR: What, When, Why, Benjamin Lok and Sriram Kalyanaraman, / Assignment #1: Critique Solo VR Experience Due  
Week 4: VR: What, When, Why, Benjamin Lok and Sriram Kalyanaraman  
Week 5: Science of Persuasion and Call to Action!, Benjamin Lok and Sriram Kalyanaraman / Assignment #3: Critique Social VR Experience Assigned, Assignment #4: Create Social VR Experience Assigned  
Week 6: Power of Iteration, Benjamin Lok and Sriram Kalyanaraman / Assignment #2: Create Solo VR Experience Due,  
Week 7: Science of Persuasion (cont'd), Benjamin Lok and Sriram Kalyanaraman  
Week 8: Power of Iteration (cont'd), Discuss class project, Benjamin Lok and Sriram Kalyanaraman  
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Week 10: Evaluating Efficacy in VR, Benjamin Lok and Sriram Kalyanaraman  
Week 11: Review Iteration #1 for all teams, Benjamin Lok and Sriram Kalyanaraman  
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Week 13: Review Iteration #2 for all teams, Benjamin Lok and Sriram Kalyanaraman  
Week 14: Future of Immersive Storytelling, Benjamin Lok and Sriram Kalyanaraman  
Week 15: Demo Day! (Review Iteration #3), Benjamin Lok and Sriram Kalyanaraman, / Assignment #4: Create Social VR Experience due

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

Class attendance is highly recommended, but will not be required.

Make-Up Policy – There is a 10% penalty for submissions that are late (maximum 48 hours after the initial deadline). Make-Up homework, projects and exams will be coordinated with the instructor for university excused absences.

Excused absences must be consistent with university policies in the graduate catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>) and require appropriate documentation.

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

The course has four assignments.

#### ***Assignment #1 - Critique a Solo VR experience - 10% of final grade***

Students will critique effective virtual storytelling experiences. Graduate students will evaluate several VR experiences and provide a critical review of the experiences by leveraging an formal critique framework.

#### ***Assignment #2 - Build a Solo virtual storytelling experience - 20% of final grade***

Students learn the skills needed to build a VR experience. Students will use a commercial 3D social space platform and learn how to use 3D virtual social spaces to address the social good. Students will learn to incorporate 2D and 3D content into a scene. Students deploy the scene to the public. Students apply this knowledge to a self-generated project to create an experience to message positive change for the social good. Grading will be focused on effective identification of a non-profit organization that works on UN Sustainable Development Goals, the effective conversion of the organization's message into a virtual reality experience as to persuade users to act on the UN Sustainable Development Goal.

#### ***Assignment #3 - Critique a Social VR experience - 10% of final grade***

Students will critique effective social virtual storytelling experiences. Graduate students will evaluate several VR experiences and provide a critical review of the experiences by leveraging an formal critique framework.

***Assignment #4 - Build a Social virtual storytelling experience to address a social good - 60% of final grade*** Students form teams and work on projects pitched to. Students will use the Agile software development method to deliver value to the UF community. Virtual social spaces will be iterated upon throughout the semester incorporating planning, development, deployment, and feedback with end users. Graduate students will routinely

test and evaluate their platform with clients and users. Graduate students will conduct multiple social sessions with large numbers of end users to impact the social good.

Grading is as follows:

40% team follows Agile processes and Scrum ceremonies (evaluated through submission of documentation)

60% evaluation of student's contribution by product owners and teammates using rubrics designed by the instructors.

There is no final exam.

<b>Assignment</b>	<b>Total Points</b>	<b>Percentage of Final Grade</b>
Critique Solo VR	100	10%
Create Solo VR	100	20%
Critique Social VR	100	10%
Create Social VR	100	60%
		100%

### **Grading Policy**

<b>Percent</b>	<b>Grade</b>	<b>Grade Points</b>
91.5 - 100.0	A	4.00
89.5 - 91.4	A-	3.67
87.5 - 89.4	B+	3.33
81.5 - 87.4	B	3.00
79.5 - 81.4	B-	2.67
77.5 - 79.4	C+	2.33
71.5 - 77.4	C	2.00
69.5 - 71.4	C-	1.67
67.5 - 69.4	D+	1.33
61.5 - 67.4	D	1.00
59.5 - 61.4	D-	0.67
0 - 59.4	E	0.00

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>

### **Students Requiring Accommodations**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. 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. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.ua.ufl.edu/students/>. 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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

### ***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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-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.

### ***Commitment to a Safe and Inclusive Learning Environment***

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- Robin Bielling, Director of Human Resources, 352-392-0903, [rbielling@eng.ufl.edu](mailto:rbielling@eng.ufl.edu)
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, [taylor@eng.ufl.edu](mailto:taylor@eng.ufl.edu)
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, [nishida@eng.ufl.edu](mailto:nishida@eng.ufl.edu)

### ***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: <https://registrar.ufl.edu/ferpa.html>

### ***Campus Resources:***

#### *Health and Wellness*

#### **U Matter, We Care:**

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*VR for the Social Good, CAP 5XXX*

*Benjamin Lok and Sriram Kalyanaraman, Fall 2020*

**Sexual Discrimination, Harassment, Assault, or Violence**

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*Academic Resources*

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<https://lss.at.ufl.edu/help.shtml>.

**Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling. <https://www.crc.ufl.edu/>.

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

**Student Complaints Campus:** <https://care.dso.ufl.edu>.

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

## ***VR for the Social Good***

CAP 4XXX

***Class Periods:*** Tuesdays, 7th-9th periods, 1:55 PM - 4:55 PM

***Location:*** virtual

***Academic Term:*** Fall 2020

### ***Instructor:***

Benjamin Lok

[lok@ufl.edu](mailto:lok@ufl.edu)

352-214-9829

Office Hours: Tuesday, 6th period, 12:50 PM - 1:40 PM, virtual meetings

Sriram Kalyanaraman

[sri@jou.ufl.edu](mailto:sri@jou.ufl.edu)

919-923-6837

Office Hours: Tuesdays, by appointment

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

Please contact through the Canvas website

- Jacob Stuart, Name of TA, email address, office location, office hours

### ***Course Description***

A multidisciplinary approach to solving pressing social problems by blending social science practices with innovative technology. Students will explore effective messaging perspectives, virtual social spaces, virtual reality technologies, and techniques for creating a compelling story for a social good issue. This class is for all students, regardless of major or prior experience.

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

COP 3503 or COP 3504

### ***Course Objectives***

The Virtual Reality (VR) for the Social Good course will have students learn the basics of message effects and how to apply these components effectively in virtual 3D social spaces, and develop virtual experiences to improve the social good. Students will create and deliver compelling interactive stories in virtual social spaces. The virtual social spaces will motivate participants to participate in improving the social good. Virtual social spaces will be iterated upon throughout the semester incorporating planning, development, deployment, and feedback with end users. Undergraduate students are expected to routinely test their platform with clients and users. Undergraduate students will conduct multiple social sessions with small groups of end users to impact the social good.

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

none.

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

There are no required textbooks. Lecture notes will be provided by the instructors. The software we will use in this class is Mozilla Hubs. Mozilla Hubs is an open-source platform to create virtual experiences on a variety of platforms. Mozilla Hubs is free to use.

### ***Recommended Materials***

none.

### ***Course Schedule***

Week 1: Introduction to Course, Messaging, and VR, Benjamin Lok and Sriram Kalyanaraman / Assignment #1:

Critique Solo VR Experience Assigned, Assignment #2: Create Solo VR Experience Assigned

Week 2: Science of Empathy, Benjamin Lok and Sriram Kalyanaraman



Week 3: VR: What, When, Why, Benjamin Lok and Sriram Kalyanaraman, / Assignment #1: Critique Solo VR Experience Due  
Week 4: VR: What, When, Why, Benjamin Lok and Sriram Kalyanaraman  
Week 5: Science of Persuasion and Call to Action!, Benjamin Lok and Sriram Kalyanaraman / Assignment #3: Critique Social VR Experience Assigned, Assignment #4: Create Social VR Experience Assigned  
Week 6: Power of Iteration, Benjamin Lok and Sriram Kalyanaraman / Assignment #2: Create Solo VR Experience Due,  
Week 7: Science of Persuasion (cont'd), Benjamin Lok and Sriram Kalyanaraman  
Week 8: Power of Iteration (cont'd), Discuss class project, Benjamin Lok and Sriram Kalyanaraman  
Week 9: Research into using VR for Social Good, Benjamin Lok and Sriram Kalyanaraman / Assignment #3: Critique Social VR Experience Due  
Week 10: Evaluating Efficacy in VR, Benjamin Lok and Sriram Kalyanaraman  
Week 11: Review Iteration #1 for all teams, Benjamin Lok and Sriram Kalyanaraman  
Week 12: VR Hardware and Software, Benjamin Lok and Sriram Kalyanaraman  
Week 13: Review Iteration #2 for all teams, Benjamin Lok and Sriram Kalyanaraman  
Week 14: Future of Immersive Storytelling, Benjamin Lok and Sriram Kalyanaraman  
Week 15: Demo Day! (Review Iteration #3), Benjamin Lok and Sriram Kalyanaraman, / Assignment #4: Create Social VR Experience due

### ***Online Course Recording***

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.

### ***F2F Course Policy in Response to COVID-19***

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](#).

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

Class attendance is highly recommended, but will not be required.

**Make-Up Policy** – There is a 10% penalty for submissions that are late (maximum 48 hours after the initial deadline). Make-Up homework, projects and exams will be coordinated with the instructor for university excused absences.

Excused absences must be consistent with university policies in the undergraduate catalog (<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>) and require appropriate documentation.

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

The course has four assignments.

#### ***Assignment #1 - Critique a Solo VR experience - 10% of final grade***

Students will critique effective virtual storytelling experiences. Students will evaluate a VR experience and provide a critical review of the experience by leveraging an formal critique framework.

#### ***Assignment #2 - Build a Solo virtual storytelling experience - 20% of final grade***

Students learn the skills needed to build a VR experience. Students will use a commercial 3D social space platform and learn how to use 3D virtual social spaces to address the social good. Students will learn to incorporate 2D and 3D content into a scene. Students deploy the scene to the public. Students apply this knowledge to a self-generated project to create an experience to message positive change for the social good. Grading will be focused on effective identification of a non-profit organization that works on UN Sustainable Development Goals, the effective conversion of the organization's message into a virtual reality experience as to persuade users to act on the UN Sustainable Development Goal.

#### ***Assignment #3 - Critique a Social VR experience - 10% of final grade***

Students will critique effective social virtual storytelling experiences. Students will evaluate a VR experience and experience by leveraging an formal critique framework.

*Assignment #4 - Build a Social virtual storytelling experience to address a social good - 60% of final grade*

Students form teams and work on projects pitched to. Students will use the Agile software development method to deliver value to the UF community. Virtual social spaces will be iterated upon throughout the semester incorporating planning, development, deployment, and feedback with end users. Students will test and evaluate their platform with clients and users. **Graduate students** will conduct several social sessions with several end-users to impact the social good.

Grading is as follows:

40% team follows Agile processes and Scrum ceremonies (evaluated through submission of documentation)

60% evaluation of student's contribution by product owners and teammates using rubrics designed by the instructors.

There is no final exam.

<b>Assignment</b>	<b>Total Points</b>	<b>Percentage of Final Grade</b>
Critique Solo VR	100	10%
Create Solo VR	100	20%
Critique Social VR	100	10%
Create Social VR	100	60%
		100%

**Grading Policy**

<b>Percent</b>	<b>Grade</b>	<b>Grade Points</b>
91.5 - 100.0	A	4.00
89.5 - 91.4	A-	3.67
87.5 - 89.4	B+	3.33
81.5 - 87.4	B	3.00
79.5 - 81.4	B-	2.67
77.5 - 79.4	C+	2.33
71.5 - 77.4	C	2.00
69.5 - 71.4	C-	1.67
67.5 - 69.4	D+	1.33
61.5 - 67.4	D	1.00
59.5 - 61.4	D-	0.67
0 - 59.4	E	0.00

More information on UF grading policy may be found at:

[UF Undergraduate Catalog](#)  
[Grades and Grading 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 by visiting <https://disability.ufl.edu/students/get-started/>. 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. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. 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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

### ***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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-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.

### ***Commitment to a Safe and Inclusive Learning Environment***

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- Robin Bielling, Director of Human Resources, 352-392-0903, [rbielling@eng.ufl.edu](mailto:rbielling@eng.ufl.edu)
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, [taylor@eng.ufl.edu](mailto:taylor@eng.ufl.edu)
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, [nishida@eng.ufl.edu](mailto:nishida@eng.ufl.edu)

### ***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: <https://registrar.ufl.edu/ferpa.html>

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***VR for the Social Good, CIS4930***

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