

**Course:** DMED 540: UX Design for Immersive media (3 credits)

Term: Summer 2023 - Term 3

**Instructor:** Pushkar Patange

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## **Course Description**

The objective of this course is to provide students with a comprehensive understanding of User Experience (UX) design principles, processes, concepts, techniques and frameworks as applied to Spatial 3D design, Virtual Reality (VR), Augmented Reality (AR) and Immersive media projects. The course aims to develop skills in the creation of immersive and interactive experiences that meet user needs and expectations. By the end of the course, students will be able to design and develop engaging and effective User experience for Immersive media projects such as VR, AR games and applications that demonstrate a solid understanding of spatial design, human-computer interaction, and user-centered design principles.

The course will consist of graduate level seminars and UX design critiques. Students will be expected to participate in classroom activities, and should show up prepared (having completed any necessary readings, or consumed any relevant media requested). Throughout the course of the semester, students will deconstruct the UX design of existing Digital products, games and experiences using the principles taught in class, complete individual and/or team-based assignments, and deliver a final team-based (1-4 students) comprehensive Spatial UX Presentation and accompanying digital prototype. The course is capped by a final class presentation of each team's project.

## **Course Objectives**

Upon completion of this elective course, students will be able to:

- Understand and demonstrate knowledge of UX design principles and how they apply to spatial 3D design, virtual reality, and augmented reality.
- Apply user-centered design methods to create interactive experiences for immersive media.
- Understand the technical constraints and opportunities of spatial 3D design, virtual reality, augmented reality and Extended Reality (XR).
- Get an introduction to current tools and software to design, prototype and test spatial 3D design, virtual reality, and augmented reality experiences.
- Communicate design ideas and solutions effectively through documentation, presentations, prototypes and Proof of concepts..
- Gain an introductory understanding of spatial design, virtual reality, and augmented reality projects that demonstrate understanding and application of UX design principles and processes.

#### Format of the Course

This course uses a flipped classroom model, where each week students will have required reading materials assigned which will be relevant to the topics discussed in the following class. Each class will consist partly of lectures, various activities, workshop elements and a lot of discussion.









# **Course Schedule**

The following schedule outlines the majority of the topics covered during the course. Based on the interaction with students as well as the topics covered by parallel courses, some topics may be added or modified during the semester at the discretion of the instructor.

Class	Topic
Week 1 (MAY 00)	Introduction to UX Design and Spatial UX
Week 2	UX Research & Design Process Assignment #1: UX Critique
Week 3	User Personas and Scenarios Assignment #2: Design Documentation
Week 4	Ideation and 3D UX Sketching
Week 5	Low-fidelity prototyping and User Interface UI for VR  Project - Briefing, Teams formation
Week 6	Spatial Interaction Design and Immersion
Week 7	Medium-Fidelity Prototyping for VR and Usability Testing for UX  Assignment #3: Project - UX Design application - Spatial UI Prototype
Week 8	Information Architecture and Content Design
Week 9	Spatial UX pipelines
Week 10	Prototyping, Usability Testing and XR Accessibility Project check in
Week 11	Spatial Aesthetics and tools to establish presence in immersive UX
Week 12	Project check in Assignment #4: Project -Final Presentations
Week 13	Project Presentations and Feedback with a focus on Spatial UX Assignment #5: Project -Final Submission









### **Course Assignments**

Note: Assignments, due dates and weighting are subject to change before the start of the semester

Assignment	Due Date	Weight	Details
Assignment #1	Week 2	10%	UX Design Critique
Assignment #2	Week 3	20%	Design Documentation
Assignment #3.1	Week 7	20%	UX Design application - Spatial UI Prototype
Assignment #3.2	Week 12	15%	10 min team presentation
Assignment #3.3	Week 13	20%	Final Project Submission
Class Participation	Week 1 - 13	15%	Contribution to class discussion, participation and group activities

### **Required Readings**

Design of Everyday things - Don Norman Hooked: How to Build Habit-Forming Products - Nir Eyal

Each week students will be assigned required readings which will be posted on Canvas. Required readings include written materials, videos, experiences and games that will be discussed during the following class. Students are expected to have read all the materials before class. There are also additional suggested readings that supplement the course notes for students interested in delving further into UX design.

#### **Attendance**

Attendance and punctuality is mandatory. Repeated offenses will not be tolerated and WILL affect your grade. You are responsible for making up for materials, in-class activities, and assignments missed. Students who are unavoidably absent due to illness or disability should notify their instructors of their situation.

Note that late assignments/projects will not be accepted without prior arrangement or medical documentation.









#### **Written & Spoken English Requirement**

As with all MDM courses, this course has a high expectation with respect to communication. You will be expected to write, speak and otherwise express yourself to a high standard in English. Written and spoken work may receive a lower mark if it is, in the opinion of the instructor, deficient in English. It is the student's responsibility to seek extra help if they are not able to perform to expectations. Please talk to your professors or to your advisors if you would like recommendations on getting extra help.

### **Religious Accommodation**

The university accommodates students whose religious obligations conflict with attendance, submitting assignments, or completing scheduled tests and examinations. Please let your instructor know in advance, preferably the first week of class, if you will require any accommodations on these grounds.

### **Academic Integrity**

MDM considers plagiarism to be the most serious academic offense that a student can commit. Regardless of whether or not it was committed intentionally, plagiarism has serious academic consequences and can result in expulsion from the university. Plagiarism involves the improper use of somebody else's words or ideas in one's own work.

It is the student's responsibility to ensure you fully understand what plagiarism is. Please see the SFU website for an explanation of the various types of plagiarism and to take the plagiarism tutorial: http://www.lib.sfu.ca/help/writing/plagiarism

### **Grading Profile**

A+	95-100
Α	90-94
A-	85-89
B+	80-84
В	75-79
B-	70-74
C+	65-69
С	60-64
F	0 - 59

## **Laptops & Cell Phones**

The use of laptops and cell phones during class is at the discretion of the instructor. *Please respect your classmates and instructors and refrain from text messages, social media, games and videos during class and workshop times.* Please note you should always bring pen and paper to class.









## **Policies**

The student and academic policies of the Masters of Digital Media Program and of Simon Fraser University apply within this course.

## Relevant SFU policies can be found at:

- Graduate General Regulations
  <a href="http://students.sfu.ca/calendar/for-students/grad-regulation.html">http://students.sfu.ca/calendar/for-students/grad-regulation.html</a>
- Academic Honesty and Student Conduct Policies <a href="http://www.sfu.ca/policies/Students/index.html">http://www.sfu.ca/policies/Students/index.html</a>
- Teaching and Instruction Policies
   <a href="http://www.sfu.ca/policies/teaching/index.htm">http://www.sfu.ca/policies/teaching/index.htm</a>
- University Policies (complete site)
   <a href="http://www.sfu.ca/policies">http://www.sfu.ca/policies</a>







