Verizon Innovative Learning Lab Program
Immersive Media

Course Overview

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Course length

This course will take approximately 10 weeks (assuming five 50-minute class periods per week).

Course overview

Welcome to Immersive Media (IM). This is a "Space Travel" themed course that creatively empowers middle school students to become creators in the field of augmented and virtual reality. Students will practice digital storytelling, interactive experience creation, augmented reality design, and virtual reality design through four hands-on units (each unit takes place on a different planet!) and sustainability-themed projects.

This course can be facilitated in a traditional style using the provided presentations and worksheets or completed in a self-guided capacity where students access the self-guided modules through a learning management system. We recommend finding the best balance between synchronous and asynchronous learning for your classroom.
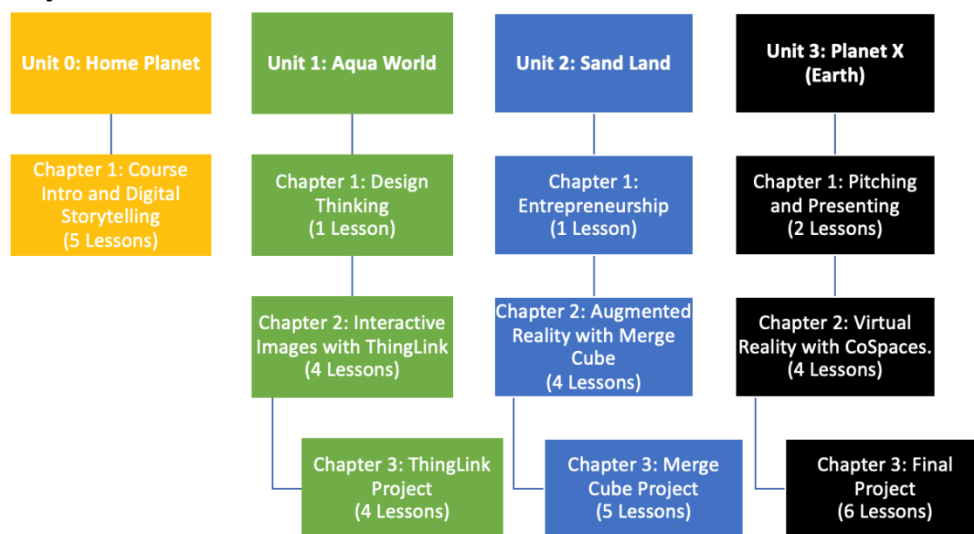
Main course objectives

Students will be able to:

- Define sustainability and solve various sustainability challenges.
- Utilize the Design Thinking process to solve real world problems.
- Develop an entrepreneurial mindset to recognize opportunities and materialize ideas.
- Create branching narrative stories with online software.
- Capture and annotate 360 images to create interactive experiences.
- Use augmented reality to program useful mobile applications.
- Solve real-life sustainability challenges with virtual reality.

Before you begin

- Review the technology whitelist at the end of this document send it to your IT department.
- Ensure you have access to all lessons and course content.
- Familiarize yourself with the course structure:

Course structure diagram:

Unit 0: Home Planet	Unit 1: Aqua World	Unit 2: Sand Land	Unit 3: Planet X (Earth)
Chapter 1: Course Intro and Digital Storytelling (5 Lessons)	Chapter 1: Design Thinking (1 Lesson)	Chapter 1: Entrepreneurship (1 Lesson)	Chapter 1: Pitching and Presenting (2 Lessons)
	Chapter 2: Interactive Images with ThingLink (4 Lessons)	Chapter 2: Augmented Reality with Merge Cube (4 Lessons)	Chapter 2: Virtual Reality with CoSpaces. (4 Lessons)
	Chapter 3: ThingLink Project (4 Lessons)	Chapter 3: Merge Cube Project (5 Lessons)	Chapter 3: Final Project (6 Lessons)

Best practices
- This is YOUR course: customize it and facilitate it to best meet your own students' needs.
- Set norms and routines for the course: will students enter class and begin completing a mission independently? Will students work in pairs? Perhaps you will "present" each lesson at the front of the room.
- Keep students accountable and evenly paced. Perhaps students cannot move on to the next lesson until their activity has been graded.
- View facilitator guides, presentations, and activities 1-2 days before teaching them! You are not expected to be an expert at the content and technology in this course, but you are expected to learn alongside your students and help them troubleshoot!
- Develop organized systems for technology: how will students label and store hardware like VR headsets and 360 cameras? How will students submit their digital experiences?
- Train a "technology team": a group of 2-3 responsible students you can task with managing VR headsets and other technology.
- This course can be taught remotely: however, identify if a lesson needs additional modification for remote instruction. For example: if students are creating prototypes, encourage them to use trash or recyclables they can find around their home.

We are so happy to have you and your students participate in this course and learn about emerging technology. Take this curriculum and technology and run with it! We can't wait to see what you and your students will create!

Technology whitelist
- Ensure your school's IT department has enabled students the ability to access the following websites and applications. These websites are student-friendly, but district approval may vary.
- **Inklewriter**: https://www.inklewriter.com/
- **ThingLink**: https://www.thinglink.com/en-us/edu
- **CoSpaces EDU**: https://cospaces.io/edu/
  - App: https://play.google.com/store/apps/details?id=delightex.cospaces.edu&hl=en_US

    The following URLs are used for communication between your ClassVR headsets and the ClassVR servers and should be whitelisted at your firewall and/or proxy server:

device.avncloud.com	avn.cloud	cospaces.io
data.avncloud.com	portal.classvr.com	edu.cospaces.io
cloud.avncloud.com	cdn1.360cities.net	cdn.cospaces.io
api.avncloud.com	cdn2.360cities.net	
  -
- **Adobe Spark**: https://spark.adobe.com/sp/
- **360 Media Library**: https://drive.google.com/drive/folders/1idK1panueMup6Hb2F8wUBvVsbfN5fMhP?usp=sharing