Bellevue College: TELOS Program

Four Thursdays: June 6, 13, 20, and 27, 2019

10:00 – 11:30 a.m. in Room V1125

**Instructor: Eric Zocher — zocherclass@gmail.com**

**Try Virtual Reality!**

This class is a hands-on introduction to Virtual Reality and Augmented Reality. You will be using about 25 different apps on three different VR devices and one AR device. The devices and apps chosen for the class will give you a broad exposure to the current state of VR and AR.

The only way to really understand what VR is about is to experience it yourself, so we will spend about 2/3 of the class time using Virtual Reality. There will be four short lectures, one to get you started and the rest to put the experiences in context and talk about the future of VR.

Every student will be paired with a buddy for safety and assistance. The pairs of buddies will be designated Team A, Team B, and so on. You will be on the same team each week.

**Class Schedule and Topics**

There will be four lectures and four Try It sessions as follows:

June 6 ⮚ Lecture: Class format and schedule; Introduction to VR and AR; Using the devices  
⮚ Try It session #1

June 13 ⮚ Lecture: Reminders about using the devices; VR terminology; Intro to MR  
⮚ Try It session #2

June 20 ⮚ Lecture: VR current landscape, near future, and potential issues  
⮚ Try It session #3

June 27 ⮚ Lecture: Location-based VR; Exploring further / Next steps for you  
⮚ Try It session #4

**Try It Sessions**

The teams of buddies will take turns trying a different device during each of the four Try It sessions. Eric will list the teams and which devices they will be using on the whiteboard.

Please consult the provided cards which show:

* The important buttons on the controller(s) and their functions
* How to put on and adjust the headset
* Instructions and tips on how to start and use the apps

**Devices**

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|  | **Device** | **Type** |
|  | Oculus Go | Basic stand-alone VR |
|  | PlayStation VR | Mid-range game console VR |
|  | HTC Vive | High-end PC VR |
|  | Apple iPad | Mid-range tablet running AR apps |

**Apps**

|  |  |
| --- | --- |
| **Device** | **Apps** |
| Oculus Go | Pixvana SPINPLAY – 360° video player  Art Plunge – Animated VR paintings  Wander – Virtually explore the real world |

**Apps (continued)**

|  |  |
| --- | --- |
| **Device** | **Apps** |
| PlayStation VR | PlayStation VR Worlds – Underwater experience  Beat Saber – Rhythm slicing game  Other games as time allows (ask Eric) |
| HTC Vive | Google Earth VR – Explore earth from above  Tilt Brush – Paint in 3D  The Lab (Valve) – VR experiments and demos |
| Apple iPad | IKEA Place – AR interior design  Google Translate – Live language translation  Blippar – People and object recognition  Envolve – Animated AR coloring books  Metaverse – Augmented Reality Art  HoloGLOBE – AR Globe with Merge Cube  Hair Color – AR Hair color swapper  Pokémon GO – AR Real-world multiplayer game  Washington Post – AR News stories and graphics  Seeing AI – AR talking camera for the blind  Sky Guide – AR Astronomy  Just a Line – Simple AR drawing Car Finder – AR Car locator (parking)  WWF Free Rivers – AR education about rivers  Yelp – AR overlay of nearby restaurants  Maps (Apple) – AR Map flyover  Measure (Apple) – AR Measuring tape  iScape – AR Landscape design  Art – AR Preview of prints and photographs  Notable Women – AR bios of notable women |

**Major VR Vendors**

Oculus (Go, Quest, and Rift) — <https://www.oculus.com/>

HTC (Vive) — <https://www.vive.com/us/>

Valve (Steam Store and Steam VR) — <https://store.steampowered.com/vr/>

Microsoft — <https://www.microsoft.com/en-us/mixed-reality>

Magic Leap — <https://www.magicleap.com/>

Apple — <https://www.apple.com/ios/augmented-reality/>

Google — <https://vr.google.com/> (PC VR)  
 <https://developers.google.com/ar/> (Android AR)

Sony (PlayStation) — <https://www.playstation.com/en-us/explore/playstation-vr/>

**Major VR News Sites**

Upload VR — <https://uploadvr.com/>

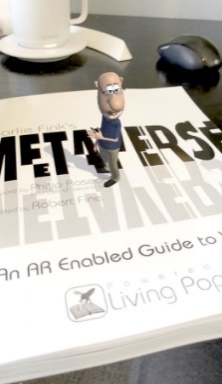
Next Reality — <https://next.reality.news/>

Road to VR — <https://www.roadtovr.com/>

VR Voice — <https://vrvoice.co/>

The Verge — <https://www.theverge.com/vr-virtual-reality>

TechCrunch — <https://techcrunch.com/tag/virtual-reality/>

**Great Books**

Fink, Charlie. *Charlie Fink’s Metaverse – An AR Enabled Guide to VR & AR*. Cool Blue Media (2018)

A broad and deep overview of the current state of VR and AR and where they are headed. Covers the history, business, and social impacts. The book is accompanied by an AR app that works on phones and tablets.

Updates: <http://finkmetaverse.com/#updates>

Bailenson, Jeremy. *Experience on Demand: What Virtual Reality Is, How It Works, and What It Can Do*. W. W. Norton & Company (2018)

Lanier, Jaron. *Dawn of the New Everything: Encounters with Reality and Virtual Reality*. Henry Holt and Co. (2017)