LIGHTWEIGHT RENDER PRIMITIVE HUT MMORPG
Virtual Embodiment and Ecological Collapse
Course Description

Taubman College of Architecture and Urban Planning		**TAUBMAN COLLEGE**	
Seminar	**Elective**	**ARCH-509**	**3 Credit Hours**
	Friday	**1-4pm**	**Winter 2022**
INSTRUCTOR	**Leah Wulfman (with guest Florian Meisenberg)**		
	lwulfman@umich.edu		

COURSE DESCRIPTION

This seminar focuses on video games and game assets as a means to view our environment—a historical and contemporary timeline of ecological collapse charted by rendering and simulation technologies. In the course, we will study virtual open-world games and the real life and simulated ecologies they are set within. Using Unity game engine, we will develop our own immersive Mixed Reality video games from trash and repurposed materials and goods pulled from our own IRL/URL environments. In addition to watching and playing open-world games like *Red Dead Redemption* 2 and *Death Stranding*, we will make use of the Computer and Video Game Archive (CVGA).

When a broken mug, half-rotten banana peel, all the way up to an existing ecology can be downloaded from TurboSquid as an obj file and then trashed in your desktop Recycle Bin, what can it mean to sift through and revalue trashed objects and materials? Every day, we throw things away. Nonetheless, the line between unwanted debris and valuable product can be rather unclear and sometimes perverse. By recycling and mining the IRL/URL worlds of objects, files and spaces, we may revalue, recontextualize, transgress and reattach the meaning and function of trash.

In sifting through and curating trash—already existing material that has been deemed done, downloaded, archived, no longer usable or worthless—we will use these IRL/URL personal and collective waste bins to describe our relationship to the environment, using methods from architecture, games, aesthetics as well as mechanized and hands-on techniques of making. As such, every other week in the class—in between readings and game play—we will quickly develop and discuss kitbashed assemblages pulled from sites we visit both on our desktops, as well as in person (Goodwill Outlet Bins, Scrapyard, Town Dump, etc.). By the end of the course, you will develop particular material aesthetics and ways of working with these composed and altered parts, and learn how to integrate them into the mixed (physical and simulated) media space of a video game.

The computational advances of the last half-century of life on Earth have allowed us to model the climate, simulate global warming to better understand its effects, equip machines with self-learning algorithms, as well as run real-time ray tracing to render endangered species and ecologies. It's no fluke that as we reach ever new heights of computational processing power and entire server farms run persistent world simulations, we face total ecological collapse. Our environments have become ever more capturable, and with such advances, open-world games have matured from playfully clunky low-resolution worlds into high-resolution simulations of actual locations. These open-world games now often draw their fictionalized landscapes from modern ecologies that, at the same time that they are being simulated, are real locations at risk of ecological collapse. The climate grief, fatalism and frontierism that are becoming more intrinsic to such game play reflect, enact and reenact our own outlooks and relationships to our environment.

The origin stories and practices of Architecture are tethered to notions of stability in relation to and reflective of the natural world. Similarly, the simulation of open worlds cannot be disentangled from the climate realities and ecologies they come from and rely on. Yet, these actual experiential bridges between such digital and physical spaces are still to be further investigated and prototyped. Preoccupied with abject aesthetic experiences with trash, compost, and post-consumerist goods, this seminar frames open worlds and environments through existing material, discarded muchness, and the literal muck of our existence.

winter 2022 seminar