

**Learning Community Title**

VR for Interdisciplinary Research

**Short Description:**

Join this dynamic learning community to explore the transformative tool of Virtual Reality (VR) across disciplines. This community is dedicated to resource sharing and invites determined faculty and staff from all disciplines, both experienced and new, to use VR to enhance their research through interdisciplinary collaboration. We support research by integrating VR into interdisciplinary studies and critically examining the subject itself, aiming to enhance cross-college collaboration and elevate DePaul's VR scholarship. Engage in monthly discussions, visit leading labs like PUSH Studio and the XR Lab at Jarvis's Innovation Center, and develop impactful projects and grant proposals. The activities of this learning community will hopefully lead to further cross-college and cross-program collaboration, culminating in a showcase at public events, such as the DePaul Art Museum, in the coming academic year.

**Full Description:**

This learning community aims to create a welcoming space for analyzing, exploring, and experimenting with Virtual Reality (VR) in interdisciplinary scholarship for creative projects, research, and/or publications. This community is dedicated to resource sharing and invites determined researchers from all disciplines to use VR to enhance their research through interdisciplinary collaboration. The group will collaborate on establishing goals and coordinating the meeting schedule and formats. We invite faculty and staff members from all disciplines who have been associated with VR to participate, as well as those new to and interested in exploring VR. (DePaul Instructional Game & Innovation Lab [DIGI] will offer XR orientation workshops for less experienced members of the learning community.)

We support research by integrating VR into interdisciplinary studies and critically examining the subject itself. We face significant gaps in understanding how VR can enhance traditional 2-D visual tools – including but not limited to – cinema, journalism, design, nursing, business, and education. Addressing these gaps is not just an opportunity but imperative for driving fresh perspectives and transformative experiences.

Themes that may be explored include, but are not limited to:

- VR in Humanities, Communication, and Cinematic Studies, e.g. theory and practice
- Rapid prototyping for VR experiences, e.g. testing tools and approaches
- Technological foundation of VR, e.g. tracking and rendering
- Human factors and psychology, e.g. cybersickness and presence
- Best practice examples, e.g. creative and industry use (Nursing, Business, Games, etc.)

The group will meet monthly, excluding winter and spring breaks. Our initial sessions will focus on building connections, defining our mission, and scheduling future meetings. Starting in the third meeting, two members will lead each discussion.

In each meeting, the volunteer presenters will identify relevant VR techniques or innovative approaches, thoroughly explore these tools, and present their findings. All members must review these techniques beforehand to facilitate meaningful discussions about their applications and creative methods.

We expect each participant to develop a research project based on insights gained, culminating in a showcase at the public event, such as the DePaul Art Museum. Additionally, we emphasize the importance of scholarship writing on virtual reality (VR), ensuring its presentation in diverse formats, including in-depth theoretical investigations and historical analyses of this medium. The group will also actively promote grant writing by identifying and pursuing funding opportunities for groundbreaking applications of VR across various fields.

By fostering collaboration and dialogue, DePaul could seamlessly integrate innovation into both its curriculum and scholarly pursuits, transforming the educational landscape for everyone involved. This community will unite researchers and creators, providing an environment where they can explore VR's vast potential and rigorously evaluate its relevance to diverse projects. We will lead the way in innovation and collaboration, shaping the future of this versatile technology.

### **Learning Community Calendar of Activities**

The main goal of this group is to connect and share existing resources while discovering new ones in virtual reality (VR). We will meet monthly, around nine times a year, excluding winter and spring breaks, for 90 minutes each session.

Our first two meetings will focus on building connections, defining our mission, and scheduling future gatherings. The final meeting will summarize our progress and plan for showcasing our work. In the first meeting, we will establish our community, set mutual goals, and agree on a mission. Participants must provide their biographies and research information in advance and receive a brief introduction to each member's research approach. The second meeting will determine our presentation schedule and explore key topics and techniques. Participants are expected to share tools and research options they wish to investigate.

Following these initial meetings, two participants will lead discussions. Faculty can introduce topics such as analyzing one's previous VR project, exploring new developments, or replicating successful projects made by other researchers.

Discussion leaders will identify relevant VR techniques to explore and present their findings. The group activity will also include visits to different labs that use VR technology, providing true inspiration and hands-on experiences, such as PUSH Studio and the XR Lab at Jarvis's

Innovation Center. At the same time, all members should actively investigate tools and resources to foster meaningful discussions about applications and creative strategies.

### **Tentative Schedule:**

September - Initial Meeting: Members will introduce themselves and define their VR research goals. We will establish a mission and a strategy to achieve our objectives.

October – Lab visits and establish a schedule.

November: Tools/Presentations/Discussions 1, 2 & 3

December: No meeting due to the quarter transition and winter break.

January: Tools/Presentations/Discussions 4, 5 & 6

February: Tools/Presentations/Discussions 7, 8 & 9

April: Envision and brainstorm research plans and/or exhibition plans.

May: Present research plans and/or exhibition plan.

June: Finalize and execute the research and exhibition plan.

### **Activities and Desired Deliverables:**

Ultimately, we aim to add a new collaborative platform for university-wide interdisciplinary research. By showcasing the diverse applications of virtual reality (VR) across various disciplines, we empower researchers to adopt a transformative perspective. As VR establishes itself in crucial fields like education, journalism, design, and humanitarian efforts, we are set to unlock significant opportunities for creative and scholarly exploration.

The group will also actively promote grant writing by identifying and pursuing funding opportunities for groundbreaking applications of VR across various fields. We emphasize the importance of scholarship writing on virtual reality (VR) and ensure its presentation in diverse formats, including in-depth theoretical investigations and historical analyses.

One of our goals is to enhance the visibility and reputation of DePaul's VR scholarship. We will utilize the DePaul Art Museum space to highlight groundbreaking findings and projects by the end of the academic calendar. This research group will serve as a vital resource, equipping members to refine their research plans and advance their current and future endeavors.