

# DIGITAL WORLDS INSTITUTE

## **DIG 5541 Managing Emerging Technology Projects 2 Credits**

**Grading Scheme:** Letter Grade

Develops competencies needed to effectively manage team-based projects built with emerging technologies. Multiple project methodologies are presented in the context of human-computer interaction and the development of virtual, augmented, and mixed realities. Presents strategies for managing project scope, the development team, deliverables, client relations, and the role of project manager.

**Prerequisite:** MA DAS program or permission of instructor

## **DIG 5555C Digital Media Projection Design I 3 Credits**

**Grading Scheme:** Letter Grade

Students will be learning theoretical, technical and historical production-oriented perspectives of using projections for a variety of events. Students collaboratively design, construct and present a digital projection media project. Students work as "projection designer" on two main projects and write a research paper on an approved topic in projection design.

**Prerequisite:** Enrollment in the MA in DAS program or DAR program, or consent of Instructor.

## **DIG 5930 Special Topics 3 Credits**

**Grading Scheme:** Letter Grade

Special Topics

## **DIG 5931C Special Topics 1-4 Credits**

**Grading Scheme:** Letter Grade

Complements theory-based digital arts offerings with an up-to-the-minute examination of emergent cultural and technological events and developments.

**Prerequisite:** Admission in MA DAS program or consent of instructor.

## **DIG 6027 Digital Storytelling 1-4 Credits, Max 4 Credits**

**Grading Scheme:** Letter Grade

Investigates participation and storytelling as foundations of interactivity. Explores how storytelling is incorporated into contemporary digital delivery platforms including games, social networks, and both linear and interactive media. Online and open-source tools are used to create content, taking advantage of mobile hardware already in students' possession.

**Prerequisite:** admission in MA DAS program or consent of instructor.

## **DIG 6028 Roots of Digital Culture 1-3 Credits**

**Grading Scheme:** Letter Grade

Interdisciplinary approach to technological and cultural underpinnings shaping current digital media (video games, the Internet, computer-animated movies, virtual reality and online social networking), exploring and presenting individuated perspectives in both written and digital media assignments.

**Prerequisite:** admission in MA DAS program or consent of instructor.

## **DIG 6050C Entertainment Technology 1-4 Credits**

**Grading Scheme:** Letter Grade

Evolving digital entertainment technologies and techniques, providing a forum to discuss current and future multimedia and hybrid media technologies, including the completion of an original design, script or treatment for a digital entertainment artifact.

**Prerequisite:** admission in MA DAS program or consent of instructor.

## **DIG 6125C Digital Design & Visualization 1-3 Credits**

**Grading Scheme:** Letter Grade

Creation of 2D and 3D content for large-scale visualization systems employed in the creative services and industrial design fields. Providing participatory experience in controlling multi-screen sound and visualization environments in both intermediate and large-scale display environments.

**Prerequisite:** admission in MA DAS program or consent of instructor.

## **DIG 6126C Interaction Design 1-3 Credits**

**Grading Scheme:** Letter Grade

Extend theoretical and practical perspectives into several focused projects using interaction principles prevalent in the entertainment and simulation industries, by creating and evaluating solutions across iterative design and testing cycles researching usability and affective influence. Emphasizes principles of cognitive psychology, including mental models, targeting and interface metaphors.

**Prerequisite:** admission in MA DAS program or consent of instructor.

## **DIG 6256C Audio Design For Digital Production 1-3 Credits**

**Grading Scheme:** Letter Grade

Capturing, storing, processing, and retrieving audio in analog and digital domains for visual media and information systems. Recording, editing, processing, and mixing sound for 2-d and 3-d artifacts.

**Prerequisite:** Admission into the M.A. in DAS program or consent of instructor.

## **DIG 6358C Applied 3D Modeling and Animation 2 Credits**

**Grading Scheme:** Letter Grade

3D asset production skills are essential for modelers and animators working in Digital Arts, Communications, Film, Interaction Design, Game, Industrial Design, and Architecture Industries. This course instructs students in the best industry standard practices and pipelines for creating 3D assets, with a special concentration in producing content for interactive media.

**Prerequisite:** (MAJOR DAS OR DAR) & CLASS GE7

## **DIG 6719 Videogame Theory and Analysis 2-4 Credits**

**Grading Scheme:** Letter Grade

Surveying the emerging interdisciplinary study of videogames. Examine contemporary and historical scholarship on the medium. Focus on video games as socially-situated semiotic spaces that exist in dialogue with society at large.

**Prerequisite:** Admission into the MA in DAS program for either the 12-hour certificate or as a full-time Major or written consent of Instructor.

## **DIG 6744C Movement, Media and Machines 1-4 Credits**

**Grading Scheme:** Letter Grade

Exploring existing and emergent relationships between human movement, interactive post-produced media and various electro-mechanical and digital machines. Texts, techniques and presentations from the spectrum of movement-based inquiry provide an interdisciplinary forum for transdisciplinary investigation.

**Prerequisite:** Admission into the MA in DAS program as a full-time Major or written consent of Instructor.

**DIG 6751C Protocols for Multimedia Interfaces 2-4 Credits****Grading Scheme:** Letter Grade

Covering protocols that control the interface components of a wide range of human-computer interaction devices including computers, mobile phones, multimedia players etc. Principles of interactive event handling and skills in coding touch screen interaction using contemporary platforms and mobile device environments, virtual world interaction, web-based interaction, as well as standard interaction methods for computer applications.

**Prerequisite:** Admission into the MA in DAS program as a full-time Major or written consent of Instructor.

**DIG 6788C Digital Production & Game Design 1-4 Credits****Grading Scheme:** Letter Grade

Students form small production teams and collaborate on a semester-long project with appointed production milestones, exploring intermediate and advanced 2-D and 3-D game design and visualization paradigms.

**Prerequisite:** Admission in MA DAS program or consent of instructor.

**DIG 6837C Digital Tools for Arts and Humanities 3 Credits****Grading Scheme:** Letter Grade

The study of digital applications, games, tools, and social networks to enhance research in the arts humanities. The course examines and expands on current theoretical discussions, applications, and methodologies. An interdisciplinary group project will further engage students in collaborative research and offer hands-on experience with digital tools.

**Prerequisite:** Class GE7.

**DIG 6840 Interdisciplinary Research Seminar in Digital Arts & Sciences 1-4 Credits, Max 6 Credits****Grading Scheme:** Letter Grade

An interdisciplinary exploration of current topics and trajectories with a goal of enabling the rapid-prototyping of ideas, inventions, and interactions utilizing the digital arts sciences. Single or multiple areas will be chosen and investigated with the intention of a resultant prototype publication, media artifact or research presentation.

**Prerequisite:** admission in MA DAS program or consent of instructor.

**DIG 6850 Digital Arts & Sciences Convergence 1-4 Credits, Max 4 Credits****Grading Scheme:** Letter Grade

Explores implications, ramifications, and transformations resulting from the convergence of traditional and digital technologies with cultural phenomena. Interdisciplinary teams study and undertake projects integrating aspects of global cultures, film, video games, animation, communications, and the recording arts.

**Prerequisite:** admission in MA DAS program or consent of instructor.

**DIG 6906 Independent Study - Graduate Level 1-4 Credits, Max 4 Credits****Grading Scheme:** Letter Grade

Independent study of individual Digital Arts Sciences projects and issues, under faculty supervision.

**Prerequisite:** Consent of faculty member supervising the study.

**DIG 6931C Special Topics 1-3 Credits****Grading Scheme:** Letter Grade

Special Topics

**DIG 6950C Digital Performance Production 1-4 Credits****Grading Scheme:** Letter Grade

Provides instruction on the configuration, assembly and execution of events in venues using streaming technologies for a variety of entertainment, business and research applications. Students demonstrate individuated achievement in performance technologies and integrated techniques via a final event of their own design.

**Prerequisite:** admission in MA DAS program or consent of instructor.

**DIG 6971 Research for Master's Thesis 1-3 Credits, Max 6 Credits****Grading Scheme:** S/U

Research for Master's Thesis

**Prerequisite:** CLASS GE7 & MAJOR DAR

**DIG 6972C Capstone Project 2-4 Credits****Grading Scheme:** S/U

Completion of an original project that addresses an identified issue or need within the field of Digital Arts and Sciences.

**Prerequisite:** Advanced standing in the MA in DAS graduate program; Permission of the Instructor.

**DIG 6973 Capstone Project in Lieu of Thesis 1-6 Credits, Max 6 Credits****Grading Scheme:** S/U

Submission of an original project based upon extended study of a topic within the field of Digital Arts Sciences (DAS). DIG 6973 is the course for students interested in completing a capstone project in lieu of a Thesis for a Master's of Arts degree.

**Prerequisite:** CLASS GE7 & MAJOR DAR