

## **New Course: Theory and Practice of Multimedia Production (CAP 3020)**

**Credits:** 3

**Prerequisites:** Introduction to Digital Arts and Sciences

**Faculty who can teach this course:** Small, Dobbins, Damkjer, Fishwick, Lok, Peters

### **Justification for Course:**

Builds upon prior coursework in both the arts and computer science by focusing on the process for developing synergistic projects. Provides practical experience in creating non-trivial cross-disciplinary projects and prepares students for the DAS Senior Project course.

### **Catalog Description:**

Combines the traditional media production pipeline and software engineering processes to synthesize an approach geared for the production of works incorporating both artistic and computational elements.

### **Objectives:**

By the end of the term, the student will have developed skills and attitudes that foster creativity and innovation. Students shall:

- < understand and accomplish all phases of a multimedia production,
- < practice effective problem-solving,
- < develop time and project management skills,
- < work effectively with a team, and
- < collaborate on synergistic interdisciplinary projects.

A full-semester multimedia project, such as an interactive game, will be used to stress the elements and phases of production.

### **Overview:**

This course takes a team-based, project-oriented approach to developing the skills necessary for the successful creation of cross-disciplinary productions.

The students have been exposed to the concept of the “production pipeline” in earlier coursework but have not had the opportunity to practice it on a *substantial* project; hence, the the core of this course is a full-semester team project. The teams shepherd their project idea through the production pipeline – from sketch and preliminary design to final implementation, testing, and postmortem. Individual students are equally responsible for contributing to both the artistic and programmatic elements of their team’s project. The instructor provides continuing oversight and guidance—ensuring that the teams stay on track and assist in resolving technical challenges.

## **Topical outline:**

*Week Content/Activity*

- 1 Team formation and initial concept development; review of production pipeline
- 2 Initial concept presentations, feedback, and approval.
- 3-7 Preproduction: concept art, scripts, storyboards, animatics; supporting software design
- 8-12 Production: content development and supporting software implementation
- 13 Post-production: integration and testing
- 14 Project demonstrations and critiques
- 15 Post-mortem and reflection of the process

## **Required Text:**

*The Art of 3-D Computer Animation and Effects, 3/e*  
Isaac Kerlow (Wiley, 2004)  
ISBN 0-471-43033-6

## **Attendance Policy:**

Required

## **Grading Criteria:**

There are 3 quizzes and a multi-phase term project. Grades are weighted:

- 20% quizzes
- 10% concept presentation
- 10% pre-production
- 20% production
- 20% post-production
- 10% post mortem analysis and critiques
- 10% participation/preparedness