**VISUAL EFFECTS (VFX)**

**VFX 200 | INTRODUCTION TO VISUAL EFFECTS | 4 quarter hours**  
(Undergraduate)  
Introduction to the use, history, and production methodologies of visual effects. Fundamental techniques will be explored through compositing exercises and projects. **PREREQUISIT(E)ES:** VFX 200.

**VFX 301 | VISUAL EFFECTS FOR EDITING | 4 quarter hours**  
(Undergraduate)  
This course integrates principal visual effects tools into post-production editorial workflows. Emphasis on efficient image manipulation and basic compositing practices. **PREREQUISITE(S):** VFX 200.

**VFX 305 | VISUAL EFFECTS PIPELINES WORKSHOP | 2 quarter hours**  
(Undergraduate)  
This workshop is a comprehensive survey of the creative and technical pipelines used for the production of visual effects. Emphasis is placed on how images, CG assets, and data are created and flow through production departments from acquisition through final imagery. **FILM 110 and POST 110 are prerequisites for this class.**

**VFX 330 | VISUAL EFFECTS SUPERVISION | 4 quarter hours**  
(Undergraduate)  
This course examines production from the perspective of the visual effects supervisor. The visual effects supervisor is the creative and technical director overseeing all aspects of the visual effects creation. Emphasis is placed on sequence design, on-set photography and data collection, as well as production management. **VFX 200 or VFX 374 and ANI 230 are prerequisites for this class.**

**VFX 334 | VIRTUAL CINEMATOGRAPHY | 4 quarter hours**  
(Undergraduate)  
This course introduces real world cinematic techniques within a computer graphics environment. Emphasis is placed on camera movement, composition, pacing, lighting, and aesthetics. **(VFX 200 or VFX 374) and ANI 230 are prerequisites for this class.**

**VFX 340 | PREVISUALIZATION | 4 quarter hours**  
(Undergraduate)  
This course introduces techniques for the rapid prototyping of creative camera and visual solutions for film and animation. Topics include story analysis, shot and sequence design, motion capture editing, technical visualization for production, and editing an effective previsualized animatic. **ANI 310 or VFX 334 is a prerequisite for this class.**

**VFX 374 | COMPOSING I | 4 quarter hours**  
(Undergraduate)  
Compositing is the art and science of manipulating the content of photographic images. This project-based course builds the core tool set for compositing live-action filmed footage. **PREREQUISITE(S):** VFX 200 or ANI 105 or GD 105 or DC 225.

**VFX 378 | COMPOSING II | 4 quarter hours**  
(Undergraduate)  
This course expands compositing workflows into three dimensional space for set extensions and compositing with complex camera movement. Emphasis on camera tracking, projections, camera stitching, morphing, and advanced compositing techniques. **VFX 374 is a prerequisite for this class.**

**VFX 374 | COMPOSING III | 4 quarter hours**  
(Undergraduate)  
This course introduces advanced concepts in compositing utilizing computer generated and filmed assets. Workflows will be explored employing matchmoving, realistic CG lighting, render passes, and multi-pass compositing techniques. **VFX 374 and ANI 339 are prerequisites for this class.**

**VFX 382 | FLAME WORKSHOP | 2-2.5 quarter hours**  
(Undergraduate)  
This course provides an advanced workshop for students to learn how to finish media using Autodesk Flame. Students will learn how to set up a project, composite, color correct, and finish shots for distribution. Post-production workflow, visual effects, and integration with editorial will also be emphasized. **VFX 378 and FILM 285 are prerequisites for this class.**

**VFX 390 | ADVANCED TOPICS IN VISUAL EFFECTS | 4 quarter hours**  
(Undergraduate)  
Advanced study in visual effects focusing on a specific area each quarter such as: virtual reality, stereoscopic compositing, visual effects supervising, visual effects producing, optical effects, etc. May be repeated for credit. **VFX 378 and FILM 285 are prerequisites for this class.**

**VFX 391 | VIRTUAL CINEMA | 4 quarter hours**  
(Undergraduate)  
Utilizing traditional, live-action, filmmaking techniques along with green screen compositing and CGI students will create high-definition narrative motion pictures. Working on a "digital backlot" students will employ HD cameras while actors work in front of a green screen for the artificial backgrounds as well as some major foreground elements to be added later during the post-production stage. Students will be expected to collaborate with animation students in the creation of their final projects. **VFX 378 and FILM 285 are prerequisites for this class.**

**VFX 399 | INDEPENDENT STUDY | 1-8 quarter hours**  
(Undergraduate)  
Variable credit. **PREREQUISITE(S):** Consent of dean. **VFX 378 and FILM 285 are prerequisites for this class.**

**VFX 405 | VISUAL EFFECTS PIPELINES WORKSHOP | 2 quarter hours**  
(Graduate)  
This workshop is a comprehensive survey of the creative and technical pipelines used for the production of visual effects. Emphasis is placed on how images, CG assets, and data are created and flow though production departments from acquisition through final imagery. **VFX 400 or POST 400 and FILM 401 are prerequisites for this class.**

**VFX 430 | VISUAL EFFECTS SUPERVISION | 4 quarter hours**  
(Graduate)  
This course examines production from the perspective of the visual effects supervisor. The visual effects supervisor is the creative and technical director overseeing all aspects of visual effects creation. Emphasis is placed on sequence design, on-set photography and data collection, as well as production management. **(POST 400 or POST 401) and FILM 401 are prerequisites for this class.**

**VFX 434 | VIRTUAL CINEMATOGRAPHY | 4 quarter hours**  
(Graduate)  
This course introduces real world cinematic techniques within a computer graphics environment. Emphasis is placed on camera movement, composition, pacing, lighting, and aesthetics. **ANI 423 is a prerequisite for this course.**
VFX 440 | PREVISUALIZATION | 4 quarter hours
(Graduate)
This course introduces techniques for the rapid prototyping of creative camera and visual solutions for film and animation. Topics include story analysis, shot and sequence design, motion capture editing, technical visualization for production, and editing an effective previsualized animatic.
ANI 450 or VFX 434 is a prerequisite for this class.

VFX 474 | COMPOSITING I | 4 quarter hours
(Graduate)
Compositing is the art and science of manipulating the content of photographic images. This project-based course builds the core tool set for compositing live-action filmed footage. Students will be introduced to design, supervision and production of a visual effects project.
POST 400 or POST 401 or ANI 423 is a prerequisite for this course.

VFX 478 | COMPOSITING II | 4 quarter hours
(Graduate)
This course expands compositing workflows into three dimensional space for set extensions and compositing with complex camera movement. Emphasis on camera tracking, projections, camera stitching, morphing, and advanced compositing techniques.
VFX 474 is a prerequisite for this class.

VFX 480 | CG COMPOSITING | 4 quarter hours
(Graduate)
This course introduces advanced concepts in compositing utilizing computer generated and filmed assets. Workflows will be explored employing matchmoving, realistic CG lighting, render passes, and multi-pass compositing techniques. PREREQUISITE(S): VFX 474 and ANI 439.

VFX 482 | FLAME WORKSHOP | 2-2.5 quarter hours
(Graduate)
This course provides an advanced workshop for students to learn how to finish media using Autodesk Flame. Students will learn how to set up a project, composite, color correct, and finish shots for distribution. Post-production workflow, visual effects, and integration with editorial will also be emphasized.

VFX 490 | ADVANCED TOPICS IN VISUAL EFFECTS | 4 quarter hours
(Graduate)
Advanced study in visual effects focusing on a specific area each quarter such as: virtual reality, stereoscopic compositing, visual effects supervising, visual effects producing, optical effects, etc. May be repeated for credit.

VFX 599 | INDEPENDENT STUDY | 1-8 quarter hours
(Graduate)
Independent study form required. PREREQUISITE(S): Consent of instructor. (variable credit)