Course Description

The goal of Digital Media Workshop is to guide students through a variety of moving image aesthetics and methodologies in order to highlight how the language of cinema shapes contemporary digital and interactive media practices. This course embraces foundation SCA filmmaking curriculum, with a forward-looking view toward the future of visual media design across formats and platforms.

Formally and topically, lectures and assignments emphasize cinematic structures relevant to undergraduates interested in interactive media production. This includes, for example, creating film space by understanding the role of blocking, lighting, composition, and editing plays in cinematic communication. The class will extend beyond traditional visualization methods to include fundamentals for real-time 3D environments. Finally, students will learn the expressive means sound design affords for both linear and nonlinear projects.

The first third of the semester will focus on filmmaking practices. And the latter 9 weeks of the semester concentrate on discussions and workshops for real-time 3D projects.

Consistently, we will address two types of communication; we will ask how time-based media communicates to the viewer or player, and we will challenge each other to express ideas and criticisms clearly and eloquently during all discussions.

Learning Objectives

Visual and interactive storytelling

- Harness cinematic language in order to communicate through visual, aural and interactive techniques.
- Articulate how individual cinematic structures build theme and story.
- Explore characterization, arc and tone.
- Create rich and meaningful sound designs.
- Articulate aesthetic and conceptual relationships between cinematic and interactive language.
Digital media development
● Create textured 3D models.
● Design stories embedded in virtual spaces.
● Design and develop 3D interactive worlds with a expressive emphasis on player point-of-view.

Production methods
● Collaborate on shared creative visions.
● Learn the role of group-planning documents.
● Learn how to give and take critique.
● Formally playtest interactive projects; tally and analyze data.

Required Readings

● *Film Art*, Bordwell and Thompson
● “Against Interpretation”, Susan Sontag
● *Sculpting in Time*, Chapter: “Time, Rhythm, Editing”, Andrey Tarkovsky
● Playing the Waves by Jan Simons
● *The Vatican to Vegas*, Introduction, Norman Klein
● *The Art of Game Design*, Chapter 2, Jesse Schell
● “And I Was In A Maze”, Umberto Eco
● “Crossing Through Labyrinths”, Ramon Espelt
● “Arrested Development: Why Machinima Can’t (or Shouldn’t) Grow Up”, Katie Salen
● “The Death of the Artist - And the Birth of the Creative Entrepreneur”, William Deresiewicz

Assignments

There are 5 projects.

The first two assignments are "real camera" projects. Formally, Project 1 is composed of a **sequence of stills**. Location sound is optional. Students will be expected to discuss their use of composition and montage in critique.

Project 2 depicts a **character** who must make a difficult decision. Students are expected to explore the role that pacing plays in storytelling.

These first two assignments challenge students to practice visual storytelling through composition, editing, and sound. During critique, students will be expected
to articulate how they embraced technical and aesthetic constraints to their expressive advantage.

By week 6, students will begin creating real-time 3D projects in Unity3D and Autodesk Maya. Project 3 is not interactive, but it is a **procedural movie**. This computational experience unfolds differently upon separate viewings; algorithms dictating the camera composition, lighting, editing, and sound provide variations. We will study the use of intelligent agents in contemporary visual effects as well as experimental approaches to "algorithmic cinema". This assignment asks students to consider the relationship between experience design and narrative authorship. How is anticipating a film audience's comprehension like designing for the player?

Project 4 is a **scripted space**. This project explores the possibilities of telling stories through interactive spaces of the likes of Dear Esther, the Night Journey, and Gone Home. That is, we will study projects known for narrative and emotional experience design. Students will build their own “interactive sculpture garden” and weight the benefits of both film and interactive storytelling techniques. A particular emphasis on sound design will be expected. Students are encouraged to incorporate the Oculus Rift and we will project them in the IMAX theater.

Project 5 is a **labyrinth**. Students will be expected to articulate how their project is a “maze of associations”. Inspired by a myriad of perspectives on labyrinths that we will read, view, and play, students are encouraged to incorporate "improbable" or "impossible" spaces.

Students will conduct formal playtests for the last two projects.

Students will work alone on projects 1 and 3, and they will be in pairs for 2, 4, and 5. This arrangement ensures that every student learns the technical and formal essentials before separating roles.

**Grading**

Project 1, Sequence of Stills: 15%
Project 2, Motion Video: 15%
Project 3, Procedural Movie: 15%
Project 4, Scripted Space: 15%
Project 5, Labyrinth: 15%
Journal and Participation: 25%

**Schedule**
**Week 1 (Day 1)**

After an introduction to the class, we will screen and discuss the relationship between the **camera** and the screen image. What does the viewer see and how is meaning expressed?

Also, we will discuss Project 1, which is due on Week 3.

**Topic: The Camera, The Shot**
- Wide, Medium, Close up
- Angles
- Leading the Action; Headroom
- Screenings: A Most Violent Year (2014), Grandma’s Reading Glass (1900), Citizen Kane (1941), La Jetee (1962)

**Workshop: (Still) Camera Essentials**

**Week 1 (Day 2)**

The principles of **montage** were outlined nearly one hundred years ago. The film cut has meaning; it follows rules of continuity at the same time it provides a substantial change in content. How do sequence and rhythm operate?

Also, we will log and edit.

**Topic: Montage**
- Continuity and editing conventions such as the 30 degree rule and the reverse angle
- Film space
- Screenings: Fire Walk With Me (1992)

**Workshop: Editing**

**Week 2 (Day 1)**

HOLIDAY

**Week 2 (Day 2)**

**Screening: Line of Action**
- Inglorious Bastards (2009)
- The Hurt Locker (2009)
- The Godfather (1972)
Screening: Rule of Thirds
- Being There (1979)

We will discuss the principles of **diegesis** and **storytelling**. Further, what is the relationship between what the character knows and what the audience knows? The filmmaker chooses what the viewer sees.

**Project 1 Milestone:** Review Student’s Digital Stills

**Readings:**
- “On Exactitude in Science” by Jorge Luis Borges (course reader)
- “Film Directing” by Steven Katz (course reader)

**Week 3 (Day 1)**
The camera’s **point-of-view** operates as a primary mechanism for cinema as argument. What does a film say by what is shows and, conversely, what is “off-screen”?

**Screening:** Cinema as Point-of-View
- Political (Island of Flowers, 1989)
- Identification (Birdman, 2014)

How does **sound design** shape our emotional experience? And what happens when we become conscious of sound?

Also, we will discuss how a film may operate on two levels - the literal and metaphorical.

**Topic:** Sound
- Voice Over (Abductees, 1995; The Savage Eye, 1960)
- Audience (Inland Empire, 2006)
- Foreground (Punch Drunk Love, 2002)

**Workshop:** Editing Troubleshooting (Project 1)

**Week 3 (Day 2)**

**Project 1 Due** - Solo project. Inspired by the Chris Marker film, La Jetée, create a short film using only still images. Using a semi-professional (or better) camera is strongly encouraged. In critique, students will be expected
to discuss the relationship between the character and audience’s point-of-view, and how composition and montage plays a role.

**Week 4 (Day 1)**
We will discuss how the various forms of **camera movement** create mood and meaning.

And we will workshop school video cameras.

**Topic**: Camera Action and Fundamentals
- Pan, Tracking, Zoom
- Camera mechanics - Focal Length; Depth of Field; Aperture; Shutter Speed

**Workshop**: Cameras and Lenses 1

**Reading**: “Film Art” by Bordwell and Thompson (course reader)

**Project 2 Milestone**: Form Teams and Brainstorm

**Week 4 (Day 2)**
In dramatic **narrative film**, the protagonist is put in conflict and then must go through a change. As viewers, we anticipate where the character will take us. And if we are surprised by an outcome, we gain insight into that character, often by way of reflecting on prior scenes.

**Screening**: Winter’s Bone (2010)

**Workshop**: Cameras and Lenses 2

**Project 2 Milestone**: Teams Compose Shotlist

**Week 5 (Day 1)**

**Guest Lecture**: Norman Hollyn

Considering the camera and editing techniques reviewed in previous classes, what is the expressive power of the **long take**? After viewing scenes with no formal cuts, we will discuss this signature approach in modernist filmmaking. Films can
simultaneously provide a fictional story while being about those cinematic modes of production that created that very fiction.

Also, we will discuss Project 2 which is due Week 6. And we will form teams.

**Topic:** The Long Take

**Reading:** Sculpting in Time, Chapter: “Time, Rhythm, Editing”, Andrey Tarkovsky (course reader)

**Week 5 (Day 2)**

**Project 2 Milestone:** Review Student Footage

**Week 6 (Day 1)**

HOLIDAY

**Week 6 (Day 2)**

**Project 2 Due** - Team project. Make a video where a character must make a difficult decision. Students are expected to explore the role pacing plays in storytelling and recorded dialogue should be sparse.

**Week 7 (Day 1)**

Since the earliest days of cinema, filmmakers have defied the rules of cinematic language, including the approaches we have studied in previous classes. Is the experimental film best understood in contrast to convention? Does the audience need to have a sense of the avant-garde filmmaker’s intentions? And what happens to radical techniques after audiences get used to them?

Also, we will discuss Project 3, due on Week 9.

**Screening:** Poetic Cinema
- Film as Material (Stan Brakhage)
- Mistakes as Beauty (Breathless, 1960)
- Mistakes as Authenticity (Walden, 1969)
- Ambient Narrative (Somewhere, 2010; Tree of Life, 2011)

**Screening:** Avant-Garde Cinema
• Artists’ Dreams (Andalusian Dog, 1929)
• Cyclic Interior (Meshes in the Afternoon, 1943)
• Music Videos (A Movie, 1958) and MTV

Reading: Michael Bay Finally Made an Art Movie

And, what is an algorithm? Is interactive cinema authored, per se?

**Week 7 (Day 2)**

SCA Stage Lighting Workshop 1

**Week 8 (Day 1)**

Popular feature animation from studios like Disney and Pixar are aligned with dramatic narrative discussed in the previous class. But the history of animation is replete with a separate approach to story. Such examples of “experimental animation” draw from elemental stories of folklore and fairy tale, and feature “scripted journeys”. The character is controlled by surrounding forces, and viewers project their own sensibilities onto the character. The videogame designer has much to learn from this history.

**Screening: Animation is Dream Allegory**

• Visual Emotion (The Cabinet of Dr. Caligari, 1919)
• Morality (Balance, 1989)
• The Animation Apparatus (The Hand, 1965)
• The Internal Made Visible (The Lump, 1991)
• Desire (The Story of the Cat and the Moon, 1997)
• The Dark Sublime (Street of Crocodiles, 1986)
• Discrete Space (Pac Man, 1980; Asteroids, 1979)
• Out of Mind (World of Tomorrow, 2015)

Separately, we will discuss the technical expectations of Project 3, which is due on Week 9. What are the possibilities of making a movie with an “intelligent” camera?

**Workshop: Unity3D Part 1** - An introduction to the Unity3D game engine with a focus on the first-person-perspective genre; triggers; transform (component).

We will beginning 3D modeling basics.

**Workshop: Autodesk Maya Part 1** - An introduction to polygons and vertices.

**Week 8 (Day 2)**
Week 9 (Day 1)
Digital media has made an old artistic approach - remediation - easy to create. Remediation is the representation of one medium in another. In fact, it is a defining characteristic of contemporary media of every kind. Further, there is an impression that, historically, every new medium absorbs the previous. For example, cinema incorporates theater, literature, and music. And now videogames remediate cinema. But if we look closely at examples, the reality of remediation is not so straightforward.

Screening: Remediation
- of Television (EA’s Madden)
- of The Video Player (Spaceballs, 1987)
- of 3D Modeling (Yokohama International Port)
- of Painting (Braid, 2008; The Cat That Got the Milk, 2012)

Workshop: Unity3D Part 2 - Path-finding for cameras and game objects; components continued; 3D sound.

Maya and Unity3D lessons continue.

Workshop: Autodesk Maya Part 2 - Modeling continued; materials and basic lighting.

Workshop: Unity3D Part 3 - Level layout.

Reading: Playing the Waves by Jan Simons (USC library online)

Week 9 (Day 2)
Project 3 Due - Solo project. Create a procedural music video, made in the Unity3D game engine. This 3D virtual project is not interactive, as it requires no player. But as a computational experience, it unfolds differently upon separate viewings; algorithms dictating the camera composition, lighting, editing, and sound provide variations.

Week 10 (Day 1)
We will study a primary influence on videogames - the scripted space (the painted dome, the mall, casinos, theme parks). Additionally, what storytelling approaches do we recognize from our discussion of animation as stories-of-elemental-
determinism from Week 8? Who is the main character - the player/protagonist or the world? This discussion naturally sets us up for understanding Project 4’s expectations, which is due Week 12. And we will form teams.

**Reading:** *The Vatican to Vegas*, Introduction, Norman Klein

**Screening:** Scripted Spaces
- Commercial Spaces (Disneyland; Ikea)

**Workshop:** Oculus Rift

**Week 10 (Day 2)**
We will workshop 2D texturing basics.

**Workshop:** Autodesk Maya Part 3 - Texturing.

**Workshop:** The Game Macro.

**Week 11 (Day 1)**
Let us think about the videogame, not as an medium, but as an experience. We will describe various types of **design goals**.

**Screening:** Spatial Puzzles (Super Mario Brothers, 1985; Papo & Yo, 2012; Antichamber, 2013; Portal, 2007; Miegakure, 2015)

**Reading:** *The Art of Game Design*, Chapter 2, Jesse Schell

**Workshop:** Oculus Rift

**Week 11 (Day 2)**

**Workshop:** Autodesk Maya Part 4

**Workshop:** IMAX Theater Introduction

**Week 12 (Day 1)**

**Workshop:** Debugging (Project 4)

**Week 12 (Day 2)**
Project 4 Due - Team project. Scripted Space. This project explores the possibilities of telling stories with virtual spaces. By incorporating custom 3D models, students will build their own “interactive sculpture garden” and weight the benefits of both film and interactive storytelling techniques. A particular emphasis on sound design is expected.

Students will conduct formal playtests.

Week 13 (Day 1)
We will continue our discussion of scripted spaces by distinguishing three types of labyrinths - unicursal, maze, and network. Historically, what types of stories feature labyrinths, and how is that related to the experience of navigating them? And so, we will discuss expectations for Project 5, which is due Week 15. And we will form teams.

Reading: “And I Was In A Maze”, Umberto Eco (course reader)
“Crossing Through Labyrinths”, Ramon Espelt (course reader)


Workshop: Unity3D Part 4

Workshop: Oculus Rift

Week 13 (Day 2)
As we learned from Klein on Week 10, broadly speaking, special effects are technological marvels controlling an illusionistic environment. How can such “spectacle of shocks” inspire videogame experiences?

Screenings: Special Effects
• As Magic (Melies)
• As Science (Bride of Frankenstein, 1935)
• As Real (Steamboat Bill Jr, 1928)
• The Loop (Tango, 1981)
• Themes and Constraints (Tron, 1982)
• Intelligent Agents (Lord of the Rings, 2001)
Project 5 Milestone: Review of team progress. What else do you need to learn in order to complete Project 5?

**Week 14 (Day 1)**
So what happens when we make movies using videogames? **Machinima** is one type of such remediation. How has it worked out?

**Screenings:** Machinima as Infinite Irony
- Personal Diary (Back and Forth, 2006)
- Transcendent Exploits (1K II Project, 2008)
- Unplay (My Trip to Liberty City, 2003; Rehearsals for Retirement, 2007)
- Surrounded and Alone (She Puppet, 2001)

**Workshop:** Autodesk Maya Part 6

**Reading:** “Arrested Development: Why Machinima Can’t (or Shouldn’t) Grow Up”, Katie Salen (USC online library)

**Week 14 (Day 2)**
Now that we can all make and distribute digital media, what is next? Who should curate art, and what exactly has the internet done for us?

**Reading:** “The Death of the Artist - And the Birth of the Creative Entrepreneur”, William Deresiewicz

**Workshop:** Debugging (Project 5).

**Week 15 (Day 1)**

**Project 5 Due** - Team Project. Labyrinth. Students will be expected to articulate how their project is a “maze of associations”. Inspired by a myriad of perspectives on labyrinths that we read, view, and play, students are encouraged to design "improbable" or "impossible" labyrinths.

Students will conduct formal playtests.

**Week 15 (Day 2)**
We will continue critiquing Project 5 as well conduct a review of the class itself.

So, what do you know now, that you did not know then?

**Final**
Eight to ten recruited playtesters will play your Labyrinth Project. You are expected to take notes and collect basic data. Then each group write a one page summary of the results in class.

**Missing an Assignment Deadline, Incompletes:**
The only acceptable excuses for missing an assignment deadline or taking an incomplete in the course are personal illness or a family emergency. Students must inform the instructor *before the assignment due date* and present verifiable evidence in order for a deadline extension to be granted. Students who wish to take incompletes must also present documentation of the problem to the instructor or student assistant before final grades are due. An Incomplete can only be assigned after the week 12 withdrawal deadline.

For assignments turned in after the assignment deadline without prior permission from the instructor, a penalty will be imposed equal to 10% of the total available points for the assignment, for each day or part of a day that the assignment is late, up to a maximum of seven days.

**Attendance Policy:**
Punctual attendance at all classes is mandatory. Students arriving more than five minutes late to three classes, more than ten minutes late to a single class, or leaving early, will be marked as having an unexcused absence from class, unless prior permission has been obtained from the instructor. The following guidelines are from the Interactive Media & Games Division handbook regarding absences and grading and apply to all students.

Guidelines for absences affecting grading
- Two unexcused absences: lowers grade one full grade point (for example, from A to B)
- Three unexcused absences: lowers grade two full grade points
- Four or more unexcused absences: request to withdraw from course (instructor’s discretion)

Excused absences are:
- Illness (with a doctor’s verification)
- Family or personal emergency (with verification)

Social media, including text messaging and internet messaging, are excluded from class unless explicitly permitted by the instructor. A 0.5% grade reduction will result from each occurrence of a student being found using them.
**Academic Conduct**

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* [https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/](https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/). Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, [http://policy.usc.edu/scientific-misconduct/](http://policy.usc.edu/scientific-misconduct/).

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* [http://equity.usc.edu/](http://equity.usc.edu/) or to the *Department of Public Safety* [http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us](http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us). This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* [http://www.usc.edu/student-affairs/cwm/](http://www.usc.edu/student-affairs/cwm/) provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

**Support Systems**

A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* [http://dornsife.usc.edu/ali](http://dornsife.usc.edu/ali), which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* [http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html](http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* [http://emergency.usc.edu/](http://emergency.usc.edu/) will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

**Disruptive Student Behavior:**

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class
pending discussion and resolution of the problem and may be reported to the Office of Student Judicial Affairs for disciplinary action.

**Syllabus Updates:**
This syllabus is liable to change up to the beginning of class and possibly over the semester. Please check the posted syllabus regularly, and note all changes that are shared by the instructor in class.