

DC 274 - Image, Optics & Cinematic Motion - Winter Quarter 2014

Instructor: Brian Mellen

bmellen@cdm.depaul.edu

Office hours: By appointment only **W 12:00 to 1:30pm DPC C106A**

Summary of Course:

Cinematography is the scientifically grounded discipline of making lighting and camera choices in order to record moving images. This course deals with the basic mathematics, physics, and photochemistry that underlies cinematography and that motivates camera design and construction. While we have adopted motion images into our daily lives, most people are unaware of the complexities involved in its creation and distribution - the "language of motion" so to speak.

As opposed to photography where the story is one still image, cinematography must deal with objects in motion and the consequential time based considerations of shutter speed vs. frame rate, image resolution, camera motion, motion perception of the viewer and the display of the image(s) on large screens.

A student who masters the foundations of cinematography through a mixture of lectures, readings, exercises, and labs will be able to evaluate and understand how motion based recording choices affect perception of moving images they see everyday.

** Syllabus is subject to change*

Course objectives:

- To control the depiction of three-dimensional space on a 2D surface through the use of optics.
- To understand the nature of light and film/video latitude.
- To control exposure.
- To determine a visual "look" and achieve it through photochemical and/or digital means.
- To understand how the relationship of resolution, frame rate, shutter speed, and camera movement influence the viewer.

Textbooks and printed resources:

Cinematography, by Blain Brown

Hand-outs supplied by instructor as needed

Grading:

| | |
|-----------------------------|-----|
| Attendance & Participation | 10% |
| Reading Quizzes | 10% |
| Assignments & In-Class Labs | 30% |
| Midterm | 20% |
| Final Exam | 30% |

LATE WORK WILL NOT BE ACCEPTED.

Grading Scale:

A = 100-93, A- = 92-90, B+ = 89-87, B = 86-83, B- = 82- 80, C+ = 79-77, C = 76-73, C- = 72-70, D+ = 69-67, D = 66-63, D- = 62-60, F = 59-0.

A indicates excellence, B indicates good work, C indicates satisfactory work, D work is unsatisfactory in some respect, F is substantially unsatisfactory work

Course Policies:

In addition to DePaul University course policies (see student handbook), the following special policies will apply to this course.

Attendance & Participation:

This course demands class participation - attendance is mandatory. Students arriving more than 15 minutes late, or leaving before class is dismissed will be considered absent. For Winter Quarter, you are allowed two (2) unexcused absences. After that, a one letter deduction for each absence will be taken from your final course grade. Three absences result in an automatic F for the course. Excessive tardiness will also be penalized.

Assignments and Exercises:

Assignments and exercises must be completed by the due date as indicated in the syllabus. Late work will not be accepted without prior consent of the instructor.

Examinations:

Students who do not take exams during the regularly scheduled time will receive a failing grade for the exam unless they have contacted the instructor in advance to arrange for a make-up exam. Make-up exams will be administered by the College according to its make-up exam schedule.

Email:

Email is the primary means of communication between faculty and students enrolled in this course outside of class time. Students should be sure their email listed under "demographic information" at <http://campusconnect.depaul.edu> is correct. All emails to the instructor must contain a heading specific to the subject discussed in the email.

Plagiarism:

Plagiarism on assignments or cheating on exams are serious offenses and earn the student a failing grade for the class. Please read the Academic Integrity Policy (AIP) at: <http://studentaffairs.depaul.edu/handbook/code16.html>.

Course Lectures/Reading Assignments:

The assigned readings offer an opportunity for independent learning that supplements the lectures. Lectures will introduce material not available in the readings, and the readings will explore concepts not mentioned in class. The exam will cover both lecture and reading materials as specified by the instructor.

Content Changes:

Depending on time factors, the assignments projected for the term may require slight alteration or rescheduling.

CLASS SCHEDULE

** Syllabus schedule is subject to change*

Week One 01/08

Lecture: Syllabus, Introductions, History of Cinematography, Thaumatrope

Lab: Intro to Lab, Procedures, and D2L

Readings: Writing with Motion (pp. 1-11), Shooting Methods (pp. 13-33), Visual Language (pp. 37-52), Language of the Lens (pp. 53-66)

Week Two 01/15

Lecture: Semiotics, Continuity and Editing

Lab: Create and Upload an Animation in Class

Readings: Visual Storytelling (pp. 67-76), Cinematic Continuity (pp. 77-102) Exposure (pp. 181-208)

Week Three 01/22

Lecture: Camera Basics, Exposure, Optical Motion

Lab: Light Metering

Readings: Optics & Focus (pp. 269-285)

Quiz 1 (Due 02/05)

Week Four 01/29

Lecture: Optics and Depth of Field, Screen Direction

Lab: Exposure - DoF

Week Five 02/05

Lecture - Review of Quiz 1, Midterm Review

Lab - ***Midterm on 02/06 in lab***

Readings: Color (pp. 227-244), Image Control (pp. 245-268), HD Cinematography (pp. 147-180)

Week Six 02/12

Lecture - Screening TBD

Lab - Optics

Readings: Lighting Basics (pp. 103-126), Camera Movement (pp. 209-226)

Week Seven 02/19

Lecture - Intro to Lighting, Camera Movement

Lab - Screening TBD

Readings: Color (pp. 227-244), Image Control (pp. 245-268), Set Operations (pp. 287-305)

Week Eight 02/26

Lecture - Specialized Cinematography, Color and Science

Lab: Slow Motion

Readings: HD Cinematography (pp. 147-180)

Quiz 2 (Due 03/12)

Week Nine 03/05

Lecture: More About Lighting

Lab: Lab Makeup

Week Ten 03/12

Lecture - Visual Effects, Review of Quiz 2, Final Exam Review

Lab - *Final Exam on 03/13 in lab*