

Autumn 2017-2018| Tuesday 8:30 – 11:45 am | Cinespace Stage 16 & Room 102  
Lecture

Instructor: Dana Kupper

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Office hours: Tuesday 11:45-1:15pm (after class) or by appointment (best)

## Course Description and Prerequisites

This course is an intensive exploration of the craft, technologies and aesthetic principles of cinematography and lighting techniques. Lectures and in-class demonstrations will cover film and video formats, film stocks, film and digital cameras, exposure, lenses and optics, lighting units, lighting placement, lighting control, camera support, and camera movement. Class sessions will consist of lectures, demonstrations, hands on with cameras and lighting units, exercises, and screenings of selected film clips which demonstrate specific cinematography and lighting techniques. PREREQUISITES: DC 210, DC 220

## Learning Outcomes:

- recognize and construct methods of visual communication.
- effectively operate an HD camera.
- identify and emulate effective lighting techniques.
- control the story from a visual perspective – color, movement, composition, focus and lighting.

## Add/Drop Deadlines:

09/13/2017 Last day to add (or swap) classes to AQ2017 schedule **(8:00am Deadline)**

## Withdraw Deadlines:

09/19/2017 Last day to select pass/fail option

09/19/2017 Last day to drop classes with no penalty (100% tuition refund if applicable and no grade on transcript)

09/20/2017 Grades of "W" assigned for AQ2017 classes dropped on or after this day

10/24/2017 Last day to withdraw from AQ classes

## Textbooks and printed resources

Required Text: Cinematography Theory and Practice by Blain Brown Third Edition

Handouts: As assigned on D2L

## Course Materials

A pair of leather/suede gloves for lighting is suggested.

## Software needed to complete assignments:

Editing platform-Final Cut Pro, Premiere Pro, or Avid

Quicktime

Word processing program

## Grading

Class Attendance and Participation	50%
Quizzes	15%
Assignment # 1	10%
Assignment # 2	15%
Assignment # 3	10%

A = 100-93 A- = 92-90

B+ = 89-88 B = 87-83 B- = 82-80

C+ = 79-78 C = 77-73 C- = 72-70

D+ = 69-68 D = 67-63 D- = 62-60

F = 59-0

### Standards for Achievement:

#### Grade A:

Student performs in an outstanding way. Student exhibits achievement and craftsmanship in all work. Design criteria is exceeded and student challenges him/herself in project design. Student exhibits commitment to expanding ideas, vocabulary and performance.

#### Grade B:

Student performs beyond the requirement of the project. Student exhibits above average progress and craftsmanship. A design criterion is exceeded. Student exhibits above average interest in expanding idea, vocabulary, and performance.

#### Grade C:

Criteria of assignment is met, and all requirements are fulfilled. Student shows average quality work and minimum time and effort on projects. Student shows moderate interest.

#### Grade D:

Student performance is uneven and below average. Requirements for projects are only partially fulfilled. Minimal interest is shown and attendance, participation and involvement are inadequate.

#### Grade F

Student fails to meet minimum course requirements and shows no interest. Levels of participation and craftsmanship are extremely poor. Student's attendance is inadequate.

### Requesting an incomplete grade:

An incomplete grade may only be assigned to a student if the student has experienced an extenuating circumstance near the end of the term, the student is in good standing in the class, and the request is made in advance. This being said it is solely up to the discretion of the instructor to grant an incomplete.

**Attendance** – Classes will consist of lecture, screenings, discussion, and creative exercises. Attendance is mandatory. An absence is defined as not showing up for class, or arriving more than 15 minutes late, or missing any 15 minute period during class time. I take attendance every class. If you arrive less than 15 minutes late, and do not hear your name called, make sure you let me know you are present so I do not mark you absent. Any absences will result in a reduction of the attendance/participation grade. Anyone who misses 3 classes will automatically drop a letter grade. Anyone who misses 4 classes will automatically fail. However, if you are legitimately sick, please stay home. Please email me at [dkupper@depaul.edu](mailto:dkupper@depaul.edu) if you are going to miss class.

**Class Participation**— Along with showing up, you are expected to join in class discussions, critique other people's work, and participate in workshops. You'll notice that a portion of your grade are the "in class" exercises. If you miss the class, you get a 0. You can do a make up assignment but it will be out of class, and won't be as much fun than if you just showed up to class.

**Assignments and Exercises** –Assignments must be handed in on time. Late assignments will be accepted on teacher discretion only. If an assignment is turned in late, it will be reduced by one letter grade per day for the first two days. After that it will receive a failing grade. Do not use class time to finalize your projects. All assignments are due at the beginning of class. If you do not arrive on time with your completed project it will be considered late.

**Written Assignments:** Must be typed.

**Digital Assignments:** All assignments handed in digitally must have a visual “slate” with your name and title of assignment, and the file name should contain your name.

**Critiques:** Due to the large size of our class, and the limited class time, not everyone's work will get a full review during class. If you'd like more feedback, arrange to discuss your work with me during my office hours. We will view and discuss everyone's final project during the last class.

**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.

### **Changes to Syllabus**

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

### **Online Course Evaluations**

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in [CampusConnect](#).

### **Academic Integrity and Plagiarism**

This course will be subject to the university's academic integrity policy. More information can be found at <http://academicintegrity.depaul.edu/>. If you have any questions be sure to consult with your professor.

### **Academic Policies**

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the [University Academic Calendar](#). Information on enrollment, withdrawal, grading and incompletes can be found at: <http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

## Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at: [csd@depaul.edu](mailto:csd@depaul.edu).

Lewis Center 1420, 25 East Jackson Blvd.

Phone number: (312)362-8002

Fax: (312)362-6544

TTY: (773)325.7296

**Production Handbook** – The School of Cinematic Arts has made a fantastic production handbook where you will find answers to your most burning questions. There are copies in the cage, or on the CDM website: <https://www.cdm.depaul.edu/Current%20Students/Pages/Production-Resources.aspx>

**Working in Groups** – For Production Assignments in this course you will be working in groups. A major component of film production is teamwork. In this course many of you will be working as a creative team for the first time. Most student teams work very well together. But sometimes personality conflicts or creative conflicts can arise. It is your job as a team to work through these conflicts, because if you don't, your project will suffer. If things get really difficult you can come to me as a team and I will help mediate/resolve the situation.

**Class Attire**--Come dressed for work. Certain clothing is required for production. You will be climbing ladders, picking up hot lamps and lifting heavy equipment, therefore no open toe shoes, NO FLIP FLOPS, and it is recommended that you do not wear dresses or skirts.

**The Stage**—Our workshop/Lab time will be held on the production stage. Let's take good care of this fantastic space. There is no eating or drinking allowed on the stage. Wrap all equipment when finished and return to the designated area. The entire class will be held responsible to return the stage to the order it was in when found. NO STUDENT LEAVES CLASS until the stage is in proper condition.

**Safety Training**—In order to use the stage for productions, safety training is required. This is an industry standardized training course that will be something you can add to your resumes.

We are doing the training in class, so make sure to attend that day.

Many of the advanced classes also require it, and you will have completed it here!

**Equipment**- The Canon C100 will be used for in class assignments. To complete out of class assignments, the students will have access to the Canon C100 camera packages and tungsten, Kino Flo and LED kits and a variety of grip equipment.

Reserve your equipment really far in advance. There is a high demand for the equipment at this school, and you do not want to be left shooting with your second choice camera.

Refer to the DePaul SCA Student Handbook for policies and rules.

<i>Week</i>	<i>Date</i>	<i>Subject</i>	<i>In Class Exercise</i>		<i>To Read in Textbook *</i>	<i>Due</i>
1	9/12	Introduction to the course and each other Brief History of Cameras The Big Picture The Camera Crew	What is the job of the cinematographer discussion activity Stage tour		<i>See textbook reading schedule</i>	
2	9/19	Camera Day! Assign Project #1	Fun activities to learn the C100			
3	9/26	How to plan to shoot a scene	Storyboard exercise Light demo			Assignment #1 due
4	10/3	Exposure Tools	Lighting exercise to learn exposure tools			
5	10/10	Lenses / Sensor size / Depth of Field/ Aspect Ratio Operating / Camera Movement	Fit it in the Frame exercise Operating exercise Plan scenes for next week			Assignment #2 due Scene breakdown/storyboard
6	10/17	Shooting a scene	Film a scene			
7	10/24	Watch scenes from last week LOG/Looks/Luts White balance/using colored light	Colored light exercise			Edited Scenes from In class exercise
8	10/31	Shoot Assignment #3	Shoot Assignment #3			
9	11/7	How to shoot an interview Low budget Lighting	Low budget light kit demo Interview exercise			
10	11/14	Watch Assignment #3				Assignment #3
11	11/21	No Class				

**\* Read Handouts as assigned. Watch videos as assigned. Check D2L for handouts and video links**

# TEXTBOOK READING SCHEDULE ---- CINEMATOGRAPHY 1

BOOK: Cinematography Theory and Practice Blain Brown

Read	Chapter	Subheading	Pages
For Week 2	Writing with Motion	All	1-11
	Set Operations	Set Operations	323
		Making it Happen	324
		The Director Of Photography	325
		The Team and the Order	331
		Camera Crew	332
		Operator	332
		First AC	333
		Second AC	335
		Loader	336
		DIT	336
		DIT workflow	337
		Simple Data workflow	337
		Digital Loader/Media Manager	338
		Utility	338
For Week 3	Cameras and Sensors (125)	HD, HD+, and UHD	127
		HD recording	127
		ISO in Digital Cameras	145
		Frame Rates	149
	Lighting Basics (259)	Lighting Basics	259-283
		WHOLE CHAPTER	
For Week 4	Coverage and Continuity (57)	Whole Chapter	57
			96
For Week 5	Measurement (151)	The Waveform Monitor	152
		Types of Display	159
	Exposure (171)	Exposure Theory	172
		What Do We Want Exposure to do For Us?	172
		Controlling Exposure	173
		Change the Bucket	174
		The Elements of Exposure	174
		Light	175
		F/Stops	175
		Shutter Speed/Frame Rate/Shutter Angle	176
		Two Types of Exposure	178
		The Tools of Exposure	181
		The Incident Meter	181
		The Reflectance Meter	182
		A Different World of Exposure	182
		Setting Exposure with the Waveform Monitor	183
		F/Stops on the Waveform	183
		The 18% Solution	184

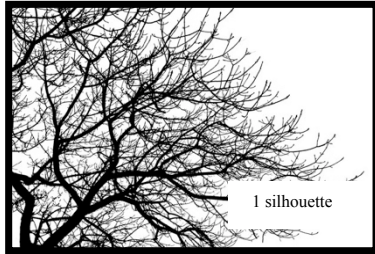
		Exposure Indicators in the Camera	185
		Zebras	185
		Histogram	185
		Use Light Meters	192
		Meter the Key	193
		Using the Waveform Monitor	193
		Placing the Middle Gray	194
		Start at the Bottom or Start at the Top	194
		Expose to the Right	195
		Zebras	196
		The Monitor	196
		Know Thyself and Know Thy Camera	196
For Week 6	Optics & Focus (285)	The Physical Basis of Optics	286
		Refraction	286
		Focal Length and Angle of View	286
		F/Stop	287
	Language of the Lens (29)	Language of the Lens	29
		The Lens and the Frame	30
		Foreground/Midground/Background	30
		Lens Perspective	31
		Wide Lenses and Expansion of Space	31
		Deep Focus	32
		Compression of Space	34
		Manipulating Perspective	36
		Selective Focus	38
		Image Control at the Lens	40
		Filtration	41
		Lens Height	42
		High Angle	42
		Low Angle	43
		Dutch Tilt	44
For Week 7	Visual Language (13)	More Than Just a Picture	14
		Forces of Visual Organization	21-25
		ALL	
		The Rule of Thirds	26
		Basic Composition Rules for People	26
		Headroom	27
		Noseroom	27
		Other Guidelines	27
For Week 7	Visual Storytelling (45)	Visual Metaphor	46
		Telling Stories with Pictures	46
		Lighting As Storytelling	48
		Film Noir	48
		Light as Visual Metaphor	49
		Light and Shadow/Good and Evil	51
		Fading Flashbulbs	53
		Visual Poetry	55
	Camera Movement (301)	Camera Movement in Filmmaking	302
		Motivation and Invisible Technique	302
		Basic Technique	303

		Types of Moves Pan Tilt Move In/Move Out Zoom Punch In Moving Shots Tracking Countermove Reveal Circle Track Moves Crane Moves Rolling Shot Camera Supports for Movement Drones Handheld Stabilizer Rigs Camera Heads The Tripod High-Hat Rocker Plate Tilt Plate The Crab Dolly Dolly Terminology	304                       308 308               317
For Week 8	Color (97)	Color Terminology Color Temperature: The Balances Warm and Cool White Balance, Black Balance, and Black Shading Magenta vs. Green Color Balance with Gels and Filters Conversion Gels Light Balancing Gels Color Correction Gels	98 99 99 101   102 111 111 112 112
	Linear,gamma, log	Log Encoding Superwhite What You See is not What You Get Log and RAW – Two Different Things	208 208 209 209
	Image Control and Grading (215)	Viewing LUTS LUTS and Looks – What’s the Difference? Controlling the Image in Front of the Lens Camera Filter Types Diffusion and Effects Filters Contrast Filters Neutral Density Filters Effects Filters and Grads	227 227 228 228 228 229 229 230

## Assignment #1 Due 9/26 @ 8:30am in the proper “submissions” folder on D2L

- ☐ Shoot the shots listed
- ☐ Each shot must be at least 10 seconds and be steady – (Tripods are cool!)
- ☐ Edit them together in order of the list
- ☐ Start the video with your name and what camera you used  
(Any camera is fine, as long as you can manually control shutter/iris/exposure/ISO/focus.)
- ☐ Label each shot onscreen

Example:

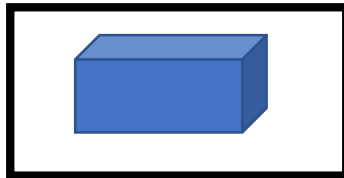


Shots assigned: (Remember, 10 seconds.)

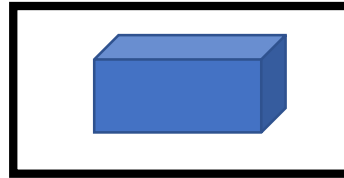
1. A silhouette of an object, maximum contrast, no greys
2. A shot with reflections, movement, and layers. Not a mirror.
3. Maximum close up of an object, must be in focus!
4. Rack focus from one object to another (each object must be in focus for at least 3 seconds.)
5. Objects in motion, (cars, animals, people, etc.)
  - a. Normal shutter angle
  - b. Short exposure time /closed down shutter angle
  - c. Long exposure time/ open shutter angle
6. A person's face with 'correct' white balance
  - a. Same shot with 'incorrect' white balance
7. Wide shot at two different ISO/Gain settings  
(Must have correct exposure. Label what ISO/Gain each was shot at.)
8. Find a shot that is correctly exposed in the middle of your iris range. While recording, slowly move the iris ring from all of the way open to all of the way closed.
9. Film the same object twice.
  - a. Using your widest lens, shoot an object so that it is at least 50% of the frame.
  - b. Using your longest lens, shoot the same object so that it is the same size in frame as shot 8.

Example:

Wide Lens



Long Lens



**Please note: This is a technical assignment, strive for technical perfection. These shots should be steady, properly focused, properly exposed, (except when the direction contradicts), and properly labeled and in order.**

## Assignment #2—Scene Breakdown— DUE WEEK 5 -- 10/10

You will be breaking down a scene to see how it is shot, and which shots made the edit.

**Have the storyboards with screenshots**, just like in my example with About Schmidt.

Turn in paper, reverse storyboards, and overheads at D2L dropbox.

Give me the scene on dropbox, or a link to the scene.

1. Have an overhead diagram with character placement/movement, and camera placement/movement.
2. Write 2 pages on how the camera and subject placement and movement enhance the story telling. How is the director/cinematographer using the tools of framing, camera height, lens choice, movement, focus, etc. to direct our eye, and create a mood? Who is the point of view character in the scene? Are there any shots in particular that cue that idea? What is the most effective shot?

**TIPS:** Pick a simple scene, probably about 5 minutes or less. Don't neglect TV shows, they shoot like we do, with economy and resourcefulness.

Assignment will be graded using these criteria:

The scene is viewable to the instructor	10	
Paper is at least two pages, double spaced.	10	
Paper is well written, and thought out. The author will link the specific tools at the cinematographer's disposal to the effectiveness of storytelling and/or mood.	30	
The storyboard is clearly laid out, with good quality screenshots, and labeled with numbers.	25	
The overhead diagram is correctly numbered and corresponds to the storyboard.	25	
Assignment turned in on time		—
<b>TOTAL</b>	<b>100</b>	

### Assignment #3 DUE: Last week of class 11/14

#### Format:

1. One edited scene uploaded to dropbox on D2L.
2. Each person must complete a group/project evaluation form (uploaded to D2L)

#### Assignment:

You will work in groups for this assignment. Using the storyboards and overheads created in Assignment #2, you will recreate *as closely as possible*, a scene from an existing film.

1. Choose one scene from your team members. Evaluate all of them, and decide as a group, which one you want to do. This scene **MUST** be approved by Dana. If you can't find one you want to do, we can pull one from another student or you can choose a new one, although you will have to break it down in the same way as Assignment 2, with screenshotted storyboards and overheads.
2. Shoot the scene together in class. The game here is to match as close as possible, so challenge yourself. Use all of the tools available to you; lens choice, lighting, camera height, camera settings, etc. There will be props or locations that are not available to you (spaceship, rain, desk) so use your imagination to mock it in. Replicate the most important elements of a scene.
3. You will be turning in one scene as a group, but it makes sense to make one or two persons responsible for the editing. They should be prepared to send rough cuts to the other members for feedback. Filmmaking is a group effort, and this is good practice to work on professional and creative dialogue. (Don't forget about using the 'look' files in post to match the scene, i.e. if it's a monochrome blue look, matching that with your grading software. If you need help with this, ask me.)
4. Preplanning is your friend. Discuss your plan and decide who is responsible for what. It may seem easy to just shoot a storyboard, but there will be things to think about such as transcribing dialogue, who is acting, locations, transporting equipment, and props. It may make sense to make one person responsible for organizing and communicating, one person to be camera and sound, one to keep track of what shots need to get done, one to do lighting, and one to do the editing. It's tricky, because that doesn't mean that everyone shouldn't pitch in, but it means that they are kind of like a 'department head', making sure all of the pieces are in place so the shoot goes smoothly.