# FILM 250 Cinematography 1 – Section 501 *12/31/2019*

Winter 2020| Wednesday 1:15pm – 4:30pm | Cinespace Stage 15 & Room 101
Lecture

Instructor: Dana Kupper (she/her)
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Email: dkupper@depaul.edu (If urgent text me ^ - otherwise emails will be answered by the next day.)
Office hours: Wednesday 11:45-1:15pm (before class @ Cinespace) or by appointment (best).

**Course Description and Prerequisites**
This course is an overview of the technologies and aesthetic principles of cinematography. The concepts covered will include digital formats, measurement and control of exposure, basic lens properties, camera support and movement, rules of composition and the placement and control of light. Class sessions will consist of lectures, demonstrations, hands-on exercises and screenings of selected film clips which demonstrate specific cinematography techniques. PREREQUISITE: FILM 110

**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:**

01/10/2020 11:59 PM Deadline to add classes to WQ2020 schedule
01/17/2020 Last day to drop classes with no penalty (100% tuition refund if applicable and no grade on transcript)

**Withdraw Deadlines & Important Dates:**
01/17/2020 Last day to select pass/fail option
01/18/2020 Grades of "W" assigned for classes dropped on or after this day
01/20/2020 MLK Day – University Officially Closed
02/21/2020 Last day to withdraw from WQ classes
03/20/2020 END WQ 2020

**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 Participation & In Class Activities | 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 is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at
http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx

**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 if you are going to miss class.

**SAFETY TRAINING**
The Safety class went online last year through each student's D2L homepage. The class can be accessed by clicking the "SCA Central" tab and then clicking "Info and Resources." The Orientation to Production and Set Safety (O.P.S.S.) modules will be in the left hand column of the page. All students should take the three video presentations and accompanying quizzes preferably before coming to Cinespace or at least within the first week of

classes. Any students who have not taken and passed O.P.S.S. will not be able to make reservations for space or equipment until they have done so.

**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. Please see https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx for additional information.

**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 seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:

- Loop Campus – Lewis Center #1420 – (312) 362-8002
- Lincoln Park Campus – Student Center #370 – (773) 325-1677

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gergory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible.
Please see https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx for Services and Contact Information.

**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.

**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.

**Preferred Name & Gender Pronouns**
Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at http://policies.depaul.edu/policy/policy.aspx?pid=332

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

| *Week* | **Date** | **Subject** | **In Class Exercise** | | **To Read in Textbook *** | **Due** |
|---|---|---|---|---|---|---|
| *1* | 1/8 | Introduction to the course and each other<br>The Camera Crew<br>Start Camera Exercises | Stage tour<br>Set up C100 | | ***See textbook reading schedule*** | |
| *2* | 1/15 | Camera Day!<br>Assign Project #1 | Fun activities to learn the C100 | | | Quiz #1 |
| *3* | 1/22 | How to use the lights/grip stuff/electricity on the stage<br>Screen direction<br>Quality of light | Light demo and hands on exercise<br>Screen direction exercise<br>Quality of light Demo | | | *Assignment #1 due*<br>Quiz #2 |
| *4* | 1/29 | Exposure Tools demo and exercise | Lighting exercise to learn exposure tools | | | |
| *5* | 2/5 | How to plan to shoot a scene<br>Lenses / Sensor size / Resolution/ Depth of Field | Storyboard exercise<br>Fit it in the Frame exercise<br><br>Assign #2 | | | Quiz #3 |
| *6* | 2/12 | Operating / Camera Movement/Aspect Ratio/Framing/Composition | Operating exercise<br>Plan scenes for next week | | | |
| *7* | 2/19 | Shooting a scene | Film a scene | | | Quiz #4<br>*Assignment #2 due* |
| *8* | 2/26 | Watch scenes from last week<br>LUT/camera/Looks/Color<br>Plan next week's shoot | Color Exercise | | | Edited Scenes from In class exercise |
| *9* | 3/4 | Shoot Assignment #3 | Shoot Assignment #3 | | | Quiz #5 |
| *10* | 3/11 | Low budget Lighting<br>Working on set – working in the business<br>Watch Assignment #3 | Low budget light kit demo | | | *Assignment #3 due* |
| *11* | 3/18 | 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 WHOLE CHAPTER | 259-283 |
| 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 |

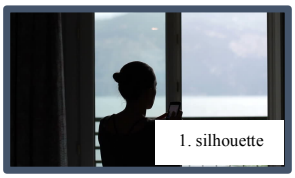
| | | | |
|---|---|---|---|
| | Camera Movement (301) | Camera Movement in Filmmaking | 302 |
| | | Motivation and Invisible Technique | 302 |
| | | Basic Technique | 303 |
| | | Types of Moves | 304 |
| | | Pan | \| |
| | | Tilt | \| |
| | | Move In/Move Out | \| |
| | | Zoom | \| |
| | | Punch In | \| |
| | | Moving Shots | \| |
| | | Tracking | \| |
| | | Countermove | \| |
| | | Reveal | \| |
| | | Circle Track Moves | \| |
| | | Crane Moves | \| |
| | | Rolling Shot | 308 |
| | | Camera Supports for Movement | 308 |
| | | Drones | \| |
| | | Handheld | \| |
| | | Stabilizer Rigs | \| |
| | | Camera Heads | \| |
| | | The Tripod | \| |
| | | High-Hat | \| |
| | | Rocker Plate | \| |
| | | Tilt Plate | \| |
| | | The Crab Dolly | \| |
| | | Dolly Terminology | 317 |
| For Week 8 | Color (97) | Color Terminology | 98 |
| | | Color Temperature: The Balances | 99 |
| | | Warm and Cool | 99 |
| | | White Balance, Black Balance, and Black Shading | 101 |
| | | Magenta vs. Green | 102 |
| | | Color Balance with Gels and Filters | 111 |
| | | Conversion Gels | 111 |
| | | Light Balancing Gels | 112 |
| | | Color Correction Gels | 112 |
| | Linear,gamma, log | Log Encoding | 208 |
| | | Superwhite | 208 |
| | | What You See is not What You Get | 209 |
| | | Log and RAW – Two Different Things | 209 |
| | Image Control and Grading (215) | Viewing LUTS | 227 |
| | | LUTS and Looks – What's the Difference? | 227 |
| | | Controlling the Image in Front of the Lens | 228 |
| | | Camera Filter Types | 228 |
| | | Diffusion and Effects Filters | 228 |
| | | Contrast Filters | 229 |
| | | Neutral Density Filters | 229 |
| | | Effects Filters and Grads | 230 |

## Assignment #1  Due Week 3 in  the proper "submissions" folder on D2L

Shots assigned: (Remember, 10 seconds.)

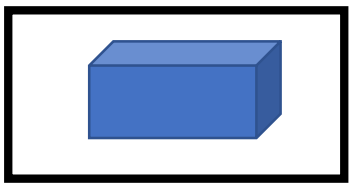
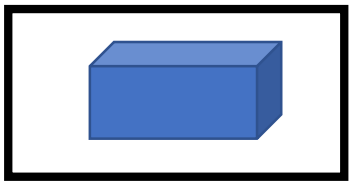
- ☐ Shoot the shots listed
- ☐ Each shot must be at least 10 seconds and be steady – (Tripods are cool!)
- ☐ Edit them together in order of the list
- ☐ Start the video with your name and what camera you used, C100 recommended
  *(Any camera is fine, as long as you can manually control shutter/iris/exposure/ISO/focus.)*
- ☐ Label each shot onscreen

Example:




Shots assigned: (Remember, **10 seconds**.)

1. A silhouette of an object, maximum contrast, no greys. A dark object against a bright background. (This is not a shadow.)
2. A shot with reflections, movement, and layers. Not a mirror or a TV.
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. A ceiling fan / Other fan / Object spinning. Must have correct exposure for each shot.
   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 for both. 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. Shoot a close up of a person: (*hint: use your ND filters/shutter/ISO to get correct exposure)*
   a. With the f-stop (aperture/iris) all of the way open (correctly exposed) *Hint: small numbers*
   *b.* With the f-stop all of the way closed (correctly exposed) *Hint: Big numbers*
   c. With the f-stop at 5.6 (correctly exposed)
10. Film the same object twice, and make sure there is some deeper background, not against a wall.
    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 a.
    Example:

Wide Lens   Long Lens

11. Start with an object or person in your frame (hold for 5 seconds), and then **pan** the camera to another person or object. (Hold for another 5 seconds)
12. Start with an object or person in your frame (hold for 5 seconds), and then **tilt** the camera to another person or object. (Hold for another 5 seconds)
13. Have someone walk toward the camera while you adjust the focus so they stay in focus the whole way. If you need someone to help you, either by operating the camera or changing the focus, that's ok.
14. Shoot a shot that is an example of a "frame within a frame."

**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 7

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 | | – |
| TOTAL | 100 | |

## Assignment #3 DUE: Week 10

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.