

CINEMATOGRAPHY AND LIGHTING

Mary Billyou, Instructor

Tuesdays & Thursdays 6:30 – 9:30pm

June 6 – July 27 2006

COURSE SYLLABUS

This workshop combines theoretical and practical elements of cinematography with special emphasis on lighting. While learning techniques of studio and location lighting, students also study historical and contemporary trends and styles. Theoretical topics include exposure, color theory, and filters. Professional techniques to alter the look of film are demonstrated and discussed. Practical tests and scenes are shot using both color and black & white film stocks.

TEXTS

The Filmmaker's Handbook, by Steven Ascher and Edward Pincus
(You can purchase this from Barnes and Noble.)

Course handouts distributed in class

MATERIALS NEEDED

Expect to shoot at least 400' of negative film, or, at least 100' of four different film stocks.

Supplies: 40' double-perf light-struck or white emulsion leader, 120' plus single-perf light-struck or white emulsion leader, four different colors of camera tape, black camera tape, sharpies, tape measure, small scissors with rounded edges (children's scissors), 16mm cores, splicing tape, and a notebook for record keeping.

Expect to budget anywhere between \$200 and \$500.

COURSE REQUIREMENTS

Do not miss a class! We will be covering new topics in every class. If you miss a class you'll have difficulty keeping up with the rest of the class. Please see me in advance if you need to miss a class. Three missed classes result in no credit.

Shoot film. You are required to shoot film stock tests and lighting tests on film. Failure to complete or fully participate in these projects will result in no credit.

Screening of Stock Tests. You are required to present at least one stock test to the rest of the class and to be prepared to discuss what you learned about the

qualities of the stock and the lighting scenario in which you shot it.

Come prepared to engage with the topics on the schedule. If readings have been assigned, be prepared to discuss them at the next class. If specific materials are required at a class, bring them.

June 6 Introductions

Film knowledge test

Class exercise: the lighted environment

Demo / authorizations: light meter, gray card, chip chart, slate, light kit, reflector, gels, flags, silks, c-stands, cookies

Work Assignment #1: collect pictures, photographs, postcards that portray use of light that interests you

Reading Assignment: Chapter 3 of *The Filmmaker's Handbook: The Lens*

June 8 Review of film knowledge test

Black and White Film Stock

Class exercise: learn stock properties by viewing excerpts of black and white films

Excerpted films:

Down By Law, Jim Jarmusch

Pi, by Darren Aronofsky

New York Portrait, Number One, by Peter Hutton

Alphaville, Godard

Revisiting Exposure and Lenses

How to a label film can and give directions for the lab

Slating

Camera reports

June 13 Demo / authorizations: Arri SR II

Loading film

Bring in your collected pictures of images that contain different uses of light for work assignment.

Discuss: Three point lighting
 Contrast ratios
 Reflected light
 Natural light

Work Assignment #2: shoot two rolls of 7222, black and white film stock in two different lighting scenarios

CR#1) Indoor/artificial/tungsten lighting
CR#2) Outdoor/natural/daylight lighting
 slate each roll with your name and
 slate each change in each scenario

Send in your shot rolls to the lab before June 15.

Read Handouts: “Light Characteristics and Lighting Features,” “transcendental domesticity: an interview with Leighton Pierce,” and Int’l Cinematographer’s Guild articles on *In the Mood for Love* and *The Virgin Suicides*

June 15 Color Film Stocks

Class exercise: learning stock properties by viewing excerpts of color films

Revisiting Exposure, Lenses, Three Point Lighting, Natural Light

Films:

Glass by Leighton Pierce
In the Mood for Love by Wong Kar-Wai
The Virgin Suicides by Sophia Coppola

Work Assignment #3: shoot two different tungsten balanced color film stocks

Shoot each roll in two different lighting scenarios
1) Indoor/artificial/tungsten lighting
2) Outdoor/natural/daylight lighting

Send in your shot rolls to the lab before June 22.

Read Handouts: “Lighting Concepts in Practice,” “Lighting Two People,” “Lighting on Location”

June 20 Lighting Styles within Context

Mood, or, the “look” of the film, Contrast Ratio review

Romantic Comedy Lighting

Friends

Soap operas

Reality Television

Film Noir Lighting

Merlin

Detour

Cat People by Jacques Tourneur

Documentary Lighting

Belfast, Maine by Frederick Wiseman

Los by James Benning

Salesman by The Maysles Brothers

Reading Assignment: handout on film stock, “Color Timing Lab Literacy,” “Do’s and Don’t from Your Lab,” Chapter 4 of *The Filmmaker’s Handbook: The Film Image*

June 22 Densitometry of Film Stocks

The Lab

CLASS FIELD TRIP TO TECHNICOLOR!!!!

Reading Assignment: Chapter 16 of *The Filmmaker’s Handbook: The Film Laboratory*

June 27 Depth of Field

Lenses, Light, ASA of film stock, camera speed

Racking focus, deep focus

View excerpts of *Citizen Kane*

Class exercise: Screening of second weeks’ black and white film stock shooting assignment

Read Handouts: Filters and color temperature handouts
Chapter 5 in *The Filmmaker’s Handbook: Color and Filters*

June 29 Color Theory

Class exercise: Screening of Assignment #2

Filters

Different Qualities of Tungsten / Daylight balanced film stocks

Overexposure / Underexposure of film stocks

The Lab Revisited

Work Assignment #4: choose one color film stock and do tests on two different rolls. Complete camera reports for each roll.

On roll #1

- 1) Shoot your film normally
 - 2) Overexpose your film by half stop increments
 - 3) Underexpose your film by half stop increments
 - 4) Filters (85 filter / 80A filter)
- Slate all changes – including addition of filters
- 5) “Process Normal” to lab

On roll #2:

- 1) Underexpose your film by one stop
 - 2) And tell lab to “Push One Stop”
- *Send your film into the lab by July 6*

Reading Assignment: Handouts on Camera Checkout, Lighting Instrument Names, Camera Operator’s Checklist, “Nuts and Bolts of Electricity and Lighting”

July 4 Cinematography’s Key Personnel

The Director of Photography

Responsibilities

Different styles of different artists

D.P. kit

The Gaffer

Responsibilities

Lighting nomenclature

HMI’s,

Power, electricity, voltage

The grip house

Gaffer kit

The Camera Assistant
Responsibilities
The camera rental house
A.C. kit

The Key Grip
The Dolly Grip

Plan final projects – 100' of a stock of your choosing
Implement three of these different shooting techniques: lighting / exposure / lab
techniques / camera speeds (Shooting for final projects can start today.)

Reading Assignment:
Chapter 11 in *The Filmmaker's Handbook: Lighting*

July 6 Screenings and Discussion

Class exercise: two different lighting set ups

Organize Final Projects: Crew Up, and Reserve Equipment

Class exercise: Screening of Assignment #3: Color Film Stocks

Assignment #8: shoot final projects
Send in your film to the lab by July 18

Reading Assignment: Chapter 8 in *The Filmmaker's Handbook: Shooting*

July 11 Set Up and Screenings

Class exercise: one lighting set up

Class exercise: view films by different D.P.'s showing different styles

Chris Doyle
Vittorio Storaro
Alex Zakrzewski
Ellen Kuras
Raoul Coutard
Janusz Kaminski

July 13 Screenings and Meetings

Class exercise: Screening of Assignment #4: Color Theory

Discuss and Troubleshoot Final Projects

Assignment #9: prep presentation on lighting in a selected film

July 18 Student Presentations

Description of the use of light in student selected films

July 20 Student Presentations

Student Presentations

Description of the use of light in student selected films

July 25 Student Presentations

Description of the use of light in student selected films

**July 27 Screening of final projects!!!!
Potluck Party**