



## **Middlesex Community College New Media Studies Center Initiative**

Course: COM\*147/ART\*147 Digital Cinematography  
*The following New Media course was developed as part of  
the New Media Studies Center Initiative TAACCCT Grant*

**July 27, 2015**

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**Middlesex Community College  
Course Syllabus**

**ART147/COM147 Digital Cinematography**  
**Monday 7:00 PM - 9:40 PM, Room 629 Chapman & Studio**  
**Professor: Michael E. Smith**  
**Office Hours- before or after class by appt.**

[msmith@mxcc.comnet.edu](mailto:msmith@mxcc.comnet.edu)

**Brief Course Description:**

The Digital Cinematography course focuses on designing and executing the visual elements of a film. Through the universal language of lenses and lighting we will learn how these play a central role when working on a set. Students will develop the skills to use a digital video camera in order to tell a story in motion. The role of the Director of Cinematography will always be emphasized. The class structure will reflect a working film set with emphasis on production. This is a hands-on course with students completing a series of practical exercises and production assignments.

Learning to create a mood advances the ultimate goal of a cinematographer. The heart of visual storytelling is composition, camera placement, camera angles, camera movement, lens choice and lighting. Above all, filmmaking is about crew collaboration, and knowing the language, tools and technology to create the story together

**Learning Outcomes of the Course:**

The goal for this course is to give you the technical knowledge of the basics of digital cinematography. We will learn the practical elements of cinematography and using light to express visually what exists only on paper as a script or concept. We intend to make the complexities of working as a digital cinematographer understandable. Our goal is to help you make your own decisions, to begin to know how to solve the various challenges in filmmaking that you will face, and to increase your understanding of the role of crew members and the collaborative nature of production.

**Students will learn the basics in the following:**

1. Operating the camera: panning, tilt, zoom, following focus, general use of fluid heads and techniques for hand holding the camera.
2. Camera controls and recording operations.
3. Meter use (understanding exposure).
4. Exposing skills: cause and effect, meter types, color bars, grey scale, introductory to the Zone System, proper use of Zebras in video exposure.
5. Interior and exterior lighting problem solving using practical lamps and existing light.
6. Color temperature: Daylight, tungsten, fluorescent, household and candles.
7. Using four-point lighting: hard and soft light, high and low key, using scrims, flags,

nets, silks and diffusion materials.

8. Work routines for getting shots completed. Crew assignments & responsibilities.
9. Screen direction logic.
10. Basic Filter use.
11. Handling and care of lenses, camera, lights, tripods, heads, monitors.
12. Understanding depth of field, graininess, sharpness and contrast.
13. Using colored gels for light balancing or to create a mood.
14. How and why to use different types of lights in order to use them effectively.
15. How to shoot a scene to create a sequence for editing. Shot combinations.

### **Teaching and Learning Methodologies:**

The course will cover introductory units in digital cinematography:

- *Camera*: viewpoint, composition, placement, angles, movement
- *Lenses*: equipment
- *Lighting*: properties, terminology, zone system, equipment, color, temperature, mood, style
- *Working on a set*: storyboards, shot lists, collaboration

After a series of introductory sessions on theory and practice, the class will operate as a working film set.

- We will look at selected scenes from films weekly to illustrate textbook assignments.
- We will shoot exercises in the studio and/or on location.
- Teams of four to five students (DP, Camera Operator, 1<sup>st</sup> AC, Gaffer, Grip/Data Wrangler/AD) will be organized and then assigned to design and execute a scene. All students must serve as DP, Camera Operator, 1<sup>st</sup> AC, Gaffer, Key Grip, Data Wrangler/Assistant Director on each other's projects. A weekly in-class shooting schedule will be determined after the introductory workshops are completed.

### **Assessment:**

**Class Attendance & Participation 40%:** Students are responsible for ownership of class materials and for being open and responsive to feedback, revisions and criticisms. Students must assume a professional demeanor during class that includes attentiveness, energy, willingness to help others and being properly prepared for each class meeting or work session.

**Class Work and Assignments 20%:** Preparation and crew participation for assigned scenes.

### **Mid-term Project 20%:**

Mid-term will be a 3-page paper about a favorite scene/sequence from a narrative film, and include the shot breakdown, describe shot selection, and sequence. Particular attention to the lighting style and color choices made in creating the scene's mood is required. Detailing the editing pace and cinematographic style are to be explained as to how these elements work together. Mid-term Project Due on March 16<sup>th</sup>, Class No. 7.

### **Final Project 20%:**

During the final three weeks of the semester each student will prepare a scene from a movie and present a breakdown and analysis to the class. Teams of 4-5 students will then be organized to work together to create a scene after it is approved by the consensus of each crew and the professor. Teams will pick lenses, colors, production design and talent. Shot list and storyboard the scene. Execute the scene in class during the final three sessions, with other class members serving as the crew. We will begin to determine crew units the first week after mid-term break.

### **Books**

Cinematography: Theory and Practice, Blaine Brown, Focal Press,  
ISBN: 9780240812090

### **Supplies**

Students are expected to own a digital still camera , either a point and shoot or DSLR. The school will supply the video cameras, lenses, tripods/dollies, lights and digital recording media.

### **Weekly Assignments: Textbook Readings**

Each week students are required to come to class having read the assigned textbook readings for the week and the corresponding DVD demonstrations. It is important that you come in prepared to ask questions and work on the set.

### **Quizzes**

Quizzes will be based on textbook readings and lectures.

### **Projects**

There will be out-of-class projects assigned throughout the semester, each getting more and more challenging and creative, building on what was learned from previous exercises. You need to be certified in camera ops before using the MxCC equipment.

**Last Regular Class May 11 / Final Project Presentations & Critiques May 18 / Grades due May 22, by “High Noon”.**

**Academic Honesty Policy:** "At Middlesex Community College we expect the highest standards of academic honesty. Academic dishonesty is prohibited in accordance with the Board of Trustees' Proscribed Conduct Policy in Section 5.2.1 of the Board of Trustees' Policy Manual. This policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism, and other proscribed activities. Plagiarism is defined as the use of another's idea(s) or phrase(s) and representing that/those idea(s) as your own, either intentionally or unintentionally." (Board of Trustees' Policy 5.2.1)

Students with physical or learning disabilities who may require accommodations are

encouraged to contact the Counseling Office. After disclosing the nature of the disability, students are urged to discuss their needs with individual instructors. This should be done at the beginning of each semester. Instructors, in conjunction with appropriate college officials, will provide assistance and/or accommodations only to those students who have completed this process.

**ADA Accommodation Statement**

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**Religious Accommodation Statement**

If your religious obligations conflict with the course calendar requirements, and if you wish to request an accommodation, you must make your request in writing prior to the date of the assessment or activity you will miss and preferably at the beginning of the semester. When requesting a make-up quiz, test, exam, assignment, or activity, state the reason for your request and the date(s) on which your religious obligation(s) will conflict with the course calendar requirements. Also, if your religious obligation/holiday is unfamiliar to your instructor, you may be asked to provide a calendar which shows the published date(s) of your religious observance(s) or holiday(s).

**Inclement Weather Statement**

In the event of inclement weather either before the start of a day when classes are in session or during the school day, you may check for information on delayed openings, college closings, class cancellations, etc by listening to the radio and television stations listed below. Additionally, a message will be posted on the MxCC website at [www.mxcc.commnet.edu](http://www.mxcc.commnet.edu) and an announcement made on the college's main phone number, (860) 343-5800. (When calling the main phone number, be sure to choose option 1 from the menu for school closings.) If classes are already in session, everyone on campus will be notified of any changes.

**Radio Stations**

WMRD 1150 am  
WDRC 102.9 fm and 1360 am  
WMMW 1470 am  
WRCH 100.5 fm  
WTIC 1080 am, 96.5 fm  
WZMX 93.7 fm  
WELI 960 am, WKCI 101 fm

**Television Stations**

WFSB - 3  
WTNH - 8  
WVIT - 30

## Course Breakdown

### Digital Cinematography / Art 147 / COM 147 / SPRING 2015 / Mr. Michael E. Smith

Class 1 Monday, Jan. 26, 2015 / Chapman Hall, Rm 629 / 2hrs 30 min.

**In class:**

#### Introduction: Cinematography, Writing with Motion

Review the course description & breakdown, textbook/DVD, homework assignments

Discuss: each student's personal experiences in image making, drawing, photography, videography, editing, etc.

Discuss: What is the job of the Director of Photography?

#### **Screen: Smith DP Reel & ESPN feature**

,Discuss each student's personal favorite film & scene. Discuss Mid-Term and Final assignments for course. (Final assignment, storyboard and shoot scene).

Give out Equipment Policy & Procedure Doc.

**BREAK: 10 mins.**

#### Discuss Conceptual Tools of Cinematography:

- The Frame (3D view in a 2D frame) Composition
- Light & Color
- Lens
- Movement
- Sequencing

#### **Screen: Citizen Kane / Seven Samurai**

#### Discuss The Language of Cinema:

-Shots, Building Blocks of a Scene, Shots in Combination:  
Wide establishing / two shot / medium / CU / Single / XCU / Over Shoulder / POV/  
Cowboy / Leading & Following shot / Tracking / Cutaway / Inserts / Transitions

**\*Production Assignment 1** – Create sequence w/ Digital Still Camera, discuss, Q&A.  
Incl. establishing shot, 2-shot, CUs, XCU, POV, High, Low, Reverses, profile, etc.

**\*Reading Homework:** *Cinematography: Theory & Practice, Chapters 1 & 2. Pp 1-36*

**Text DVD view:** Camera set-up in prep for Peter's demonstration Class 2.

**Mr. Smith, contact:** [msmith@mxcc.commnet.edu](mailto:msmith@mxcc.commnet.edu)

## **Class 2 Feb. 2, 2015**

**In class:** Discuss Camera controls & Menus.

- Lens: Focus Ring, Aperture, Zoom Control, (Lens mount and back focus)
- Black & White Balance, Presets, Gain Control, View Finders, audio adjustments
- color selection, daylight/tungsten, use of Zebras for exposure

**Screen: IATSE Centennial Film Open /** Portions, showing various crew opportunities.

Discuss Department Equipment Policy & Procedure, Certification.

Camera Tech with Peter. We will set-up / assemble the camera, Panasonic w/ zoom lens and tripod. We will go over settings and menus for the camera. Each class member will examine the camera, set-up for a tungsten shoot, adjust eye-piece, set up tripod, and assemble and use the video monitor and digital eyepiece.

**Screen: Citizen Kane,** (*childhood scene in snow, librarian in archives scene*).

**Discuss Shooting Methods:** Master Scene, Coverage, Triple-Take, In-One, Freeform Montage

**Review Sequencing Assignment 1** w/ students work on still cameras. Screen homework.

**Homework Read:** *Cinematography: Theory & Practice, Pgs. 37-76 Visual Language, Language of the Lens, Visual storytelling.*

**TEXT DVD:** Set Operations: Using Light Meters, Camera Basics: Depth of Field, Focal length

## **Class 3 Feb. 9**

**In class: Discuss crew roles on set:** Camera Operator, 1<sup>st</sup> AC, Grip, Gaffer, Best Boy, Data Wrangler, AD, & relationships for each w/ DP.

**Text Review:** Visual Language/ Language of the Lens, Visual storytelling.

**Screen: Chinatown**

**Break: 10-mins.**

We will go over Depth of Field, f-stops, Focal length, lens choices, monitor set-up. We will continue working with the tripod and monitor in Rm 409 or outdoors if weather is good. In addition we will learn about focus pulling and focus marks.

**Screen: 3:10 to Yuma**

**Homework Read:** Pgs. 147- 208 HD Cinematography, Exposure

**Text DVD video:** Lighting Fundamentals

**Production Assignment 2, create a sequence, on video camera.**

## **Class 4, Feb. 23**

**In class:** Review student homework, production assignment 2, create an original sequence.

**Text review:** Video formats, HD, camera set-up, black balance, white balance, zebras, daylight/tungsten, blending, Exposure, Gray Scale, Zone System. Exposure Meters, Incident & Spot Meters, Color Temperature: daylight vs. tungsten vs. fluorescent vs. household practical  
Creating your look, selecting the color and lighting scheme to present your story.

**Screen:** **Hurt Locker** (taxi driver – bomb defuse scene) **American Sniper** (if available)

### **Break**

**In Class:** Do an interview set-up w/ lights in the studio & hallway tracking shots (2 groups). Incorporate tripod pans, tilts, whip pan, follow focus, handheld lead and follow shots.

**Production assignment 3, shoot an original video sequence, 1-min. max.**

**Homework Read:** pgs. 77-102 Cinematic Continuity AND pgs. 103-128 Lighting Basics

## **Class 5, March 2**

**In class: text review Lighting Basics/ Cinematic Continuity:**

Use Camera on tripod under soft lighting set-up (day interior in classroom)...pan, tilt, high and low angle, dutch angle, wide angle and telephoto. Practice taking focus marks while the subject is moving. Initial Lighting Tech, review lighting package and assembly. Go over each light and explain difference in qualities and textures. C-stand & gobo arm use.

**Screen: student production assignment 3.**

### **Break**

**In Class:** Do an interview set-up w/ lights in the studio & hallway tracking shots (2 groups). Incorporate tripod pans, tilts, whip pan, follow focus, handheld lead and follow shots.

**Screen: No Country For Old Men** (motel murder day & night scenes)

**Discuss Mid-Term Assignment, due Class 7, March 16**

**Mid-term, a 2-3-page paper** about a favorite scene/sequence from a narrative film, including story board w/ shot breakdown, describe shot selection, and sequencing. Particular attention to the lighting style and color choices used to create the mood of the scene with detailed analysis of the cinematographic style and editing technique to explain their effect on the viewer.

**Homework Read Text:** Camera movement pgs. 209-226, Color 227-244

**Production Assignment: Write your Mid-term paper.**



## Class 6, March 9

**In class text review:** Camera movement, types of moves, moving shots, camera mounting, dollies, cranes, planes, choppers, steadicam. Color, qualities of color and light, gels, filters, color correction, light balancing, color temperature.

**Screen: Goodfellas & Bonfire of the Vanities** (In-One, steadicams) Steadishots.org

**In class exercise:** Camera Movements, follow focus, Blocking and Covering a Scene, Plan Sequence...Classical Master Shot Discipline, 2-shots, singles, cutaways, povs. This reviews shooting methods from pgs. 27-33 and relates to blocking the scenes for sequence.

### **Break**

**In class exercise:** During the next 30 minutes we will continue the lighting tech and show how to use scrims, flags, barn doors, dimmers, cookies, gobos, black wrap, gels, diffusion, reflectors. Begin to look at the quality of each light and why to choose one fixture over another.

**Screen: Psycho** (*motel shower and discovery scene*) discuss design & sequencing.

**Homework Read:** Set Operations pgs. 287-306 **MID-TERM Papers due next Class.**

## Class 7 March 16     Mid-Term Papers Collected

**In Class: review Set Operations:** Shot list, DP role, Team roles, Slating, Camera reports

**Screen: Light on the River**, crew scene (sequencing a moving object) & Iowa Capitol Bldg (sequencing for a static object). **For the Longest Time**, Discuss cranes, dollies, helicopter shots. Diagram on board the various angles covered in the crew scene and how accomplished.

### **In Class discussion:**

Basic 3/4 Key Point Lighting

Good and Bad Shadows

Diffusion and Fill

Wide Angle vs. Telephoto

Lighting The Face: The Dramatic Close-up

analyze direction and quality of the light...soft vs. hard light...add the dimension of color...obscuring vs. revealing...beauty lighting...

**Screen: Apocalypse Now Redux** (*finding Kurtz*) don't be afraid of shadows, Hi Con look.

### **Exercise:**

Light a person (sitting in a chair) with 3 lights. Use hard, soft and colored lights. Shoot a Wide establishing shot, full, medium shot and close-up.

Light a close-up near a window using nets, flags, diffusion, negative fill, the key light, Use of darks and shadows, color balance different sources within the scene (daylight/tungsten).

**Homework Read:** Image Control pgs. 245-268 AND Optics/Focus pgs. 269-286

**Production Assignment:** Shoot a chase sequence, **SAFELY.**

### **Class 8, March 23**

#### **In class:**

Dramatic lighting: mood, dimmers, colors...night interiors using cool and warm mix...day interiors...gel on windows or match daylight color temperature, blue gels...warm key...contrast glass...block sun and create your own, light from outside, Controlling daylight exteriors.

**Screen:** *Rushmore*, opening *Ace Ventura*, opening

#### **Break**

**Screen:** student production chase sequences

**Homework:** Textbook- Lighting Sources, pgs. 129-146

Text DVD, Lighting

### **Class 9, March 30**

**In Class:** Review Mid-Term Papers, screen the scenes selected by students, discuss. Think of groups for Final Project. Each group will need an editor to assemble the sequence.

**Review Text:** Camera filters, Color Temperature, Polarizers, Density filters.

**Exercise:** Cross Key Lighting

Motivated lighting and continuing the source

Most important areas and where actors stop

Light a person moving to different spots using various color choices, angle choices.

**Screen:** *Titanic in a Tub & Lost to the Revolution*, tabletop photography, animated scenes

Discuss close-up photography, tabletop lighting, food & beverage ads, Unilux lighting  
Use follow focus and tripod on wheels. Discuss Cranes & Dollies as seen above clips.

**Homework Read:** Technical Issues, pgs. 307-334

### **Class 10, April 6**

**Discuss and set the Film crews for Final Project.** Discussion of assignments in individual groups. Story board for each group, scouting plan, schedule cameras/lights, etc.  
Discuss scouting a location/ lighting issues, audio issues, loading eqpt. in and out, recon.

**Exercise:** Shoot a daylight interior scene, full coverage sequence (use of blue gels, tungsten, fluorescents, Kinos or HMI heads.

#### **Break**

**Exercise:** Shoot a night interior scene in bedroom or living room.

Composition: how to make a shot work, camera angles, dutch angles, hi or low angle, lens choices, pan, tilt, steadicam, crane or handheld.

Scouting a location/ lighting issues, audio issues, loading eqpt. in and out recon.

**Production Assignment:** Pre-Production planning w/ your group, assign story board, scouting, props, costumes, etc.

## Class 11, April 13

**In class: Group review of pre-production planning, discuss team needs and crewing.**

**Exercise:** Do an exercise with soft lighting. Light and film a person against a solid black background using large soft key light, slight fill light and a subtle backlight. Dolly in moving slowly from a 'cowboy' to an extreme 'close-up'.

**Screen: The Godfather**, Lawyer visits on movie set, Hollywood mansion & horse head scene.

**Break**

**Screen: The Family of Japan**, Montage, series of shots related by theme.

**Review:** Building blocks of a scene (p. 17), Shooting Methods, (p. 27-33), Crew responsibilities. Covering a scene & continuity: matching sizes, eye lines, lens, distances, screen direction, action axis, enter/exit, traveling one direction Pre-Visualizing and bringing it all together

**Screen: Raging Bull**

**Production Assignment: Cast & Crew Pre-Production w/ your group for Final shoot**

## Class 12, April 20 Final Projects Production

**Groups Shoot Finals Projects**

## Class 13, April 27

**Groups Shoot Final Projects**

**Screen:** previous week's work.

## Class 14, May 4

**Groups Shoot Finals Projects**

## Class 15, May 11

**Groups edit Finals Projects**

## Class 16, May 18<sup>th</sup>, FINAL EXAM Presentations

Groups 1 & 2 present Final edited projects w/ shot breakdown, story board & camera reports.  
Groups 3 & 4 present Final edited projects w/ shot breakdown, story board & camera reports.