Introduction to Cinematography

Introduction to Cinematography

Digital Video Production
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Still from Student Video Created in Adobe® Premiere™
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Cinematography I Class
Getting and Introductory Lesson in Adobe Premiere
Coral Reef High School implemented the first courses in Cinematography in 2000. Before this time, my main area of teaching was fine art. However, with the excellent training and resources I have included in this workbook, it was possible for me to apply my background in art and design to the dynamic discipline of video.

My video students begin their work using digital cameras. Our lab consists of only two i-Macs and the students take turns downloading video and setting up preliminary edits using i-Movie.

When we are ready for more challenging editing options, we move on to Adobe Premiere which offers many more transitions as well as advanced tools for assembling clips and images and incorporating music.

This course has offered students a new mode of expression for many of their other classes including history, social studies and music and has enriched their educational experience overall.
The cinematography project I did started in English class. A film of my little brother which I did to complete an English assignment lead to a love of film making and lead me to work with Ms. Hanks to develop new techniques and creative approaches.

The English Class assignment was a creative presentation on *The Book of Embraces*, by Eduardo Gaulliano. His book consisted of little stories about many topics. It is more like a verbal scrapbook than a novel. I selected a story about childhood from the book to report on but decided that instead of a book report I would explore the concept of childhood by working with one of my numerous siblings to make a movie about childhood fears and fantasies. The story was developed around the theme of a dream sequence.

By doing the film instead of a book report, I connected the theme of the story to myself. This enabled me to more easily find connections between the stories in the book and my own experience. The project was very well received by the English class. In fact the presentation almost intimidated the other students with more traditional presentations. In future projects I would definitely take the creative approach because you not only fulfill the assignment but you get other people interested in the topic. And besides, it is more entertaining.

Filmmaking is becoming an important hobby for me now. I make movies all the time just for fun. I am now studying history and have started a project to learn about a country and personalize my understanding of that country; give it a life. The country I will be studying is Vietnam and I am sure that a film will bring the country to life in exciting ways.
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Course Overview

Course Objectives:
This is a comprehensive course in cinematography using video and digital video capabilities to produce student projects. The course covers policies and procedures, rights and restrictions of copyright and film production. The course also covers basic film terms, film history, and production techniques, including the use of the video technology cameras and digital video editing equipment and software. Students are expected to develop skills in screenwriting, casting, pre-production planning, digital video editing and post production. Final portfolio requirements include several digital video works as well as written film critiques.

Course Goals:
The overall goal of this course is to introduce students to a broad understanding of the field of cinematography, including film history, screenwriting, film technology and film production.

Rubric Indicators:
Students will demonstrate an understanding of copyright, film production rights and restrictions. Through their final video projects, students will demonstrate a mastery of the film making process including: screenwriting, casting, camera functions, editing and post-production.

Task Summary:
- Master film vocabulary
- Discuss and apply copyright techniques and rights of musicians, authors and producers.
- Demonstrate an understanding of film by completing film critiques on domestic and foreign films, studio and independent films and film timelines
- Read and report on a variety of screenplays and film magazines
- Master film tools and techniques
- Produce at least 2 digital video works
- Successfully complete course examinations covering vocabulary, technology and history, pre and post-production

Florida Sunshine State Standards:

See Detailed Standards Section 3:
1. Aesthetic & Critical Inquiry
2. Cultural and Historical Content
3. Studio Skills
4. Personal Development
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Course Overview Continued

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Using Adobe Premiere to Output Video to the Web


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Guidelines for Shooting Video

## Introduction to Cinematography

### Lesson Plan Table

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ANALOG
An electrical signal that uses continuously varying electrical voltages. Analog video that is copied or edited multiple times suffers from generation loss and is degraded by each copy due to loss of signal strength, noise and distortion.

APERTURE
An adjustable opening in a lens which, like the iris in the human eye, controls the amount of light entering a camera. The size of the aperture is controlled by the iris adjustment and is measured in f-stops. A smaller f-stop number corresponds to a larger opening which passes more light. F-stop examples are F2, F2.8, F4, F5.6, F8, F11. F-stops are logarithmic. Each stop admits 100% more light than the previous one.

Many camcorders today offer automatic exposure where the iris adjustment is controlled automatically for proper lighting. Generally, there is a manual exposure override, where the light value can be adjusted. Few of today’s camcorders use f-stops as a form of light calibration.

ASPECT RATIO
Ratio of picture height to picture width in video and TV systems. The standard is 3:4. This is an important ratio to remember when creating graphics that will be output to video, to ensure that the graphic is sized appropriately for the TV. 750 x 560 pixels is an appropriate size.
BETAMAX & BETACAM
The obsolete home video format. Lost the format battle to VHS even though it was slightly superior. The cassette size, however, went on to become BETACAM, which became the most common broadcast-quality video format. BETACAM SP is the enhanced version.

CCD
Charged Coupled Device. A light sensitive integrated circuit that captures video images, and forms the heart of all of today’s camcorders.

CATV
Acronym for cable TV

CHROMA
The color information in a video signal, consisting of hue and saturation of the color

CHROMA KEY
The process of overlaying one video signal over another by replacing a range of colors with the second signal. Typically, the first (foreground) picture is photographed with a person or object against a special, single-color background (the key-color). The second picture is inserted in place of the key-color. The most common example is in broadcast weather segments where pictures of weather maps are inserted "behind" the forecaster.
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CHROMINANCE & CHROMINANCE LEVEL
The color portion of a video signal that represents the saturation and tint at this particular point of the image. Black, gray and white have no chrominance, but any colored signal has both chrominance and luminance. The higher the chrominance level, the stronger the color (e.g., a strong signal produces red, and a weak signal, pink).

COLOR TEMPERATURE
A method for measuring the overall color of a light source, measured in degrees Kelvin (deg.K). Higher numbers indicate bluer light, lower numbers indicate a warmer light. The color temperature of the lighting must match the color temperature of the camera. In video this is accomplished by setting the white balance of the camera. Sunny Daylight is approximately 5500 deg.K. Overcast daylight is higher. Fluorescent Lights are approx. 4100 deg.K. Indoor incandescent lights are 2800 deg.K and professional Movie Lights are 3200 Deg. K.

Most modern camcorders have automatic white balance, but it is important to point the camera at a pure white object after moving from one type of lighting conditions to another, such as from inside to direct sunlight. Otherwise the tint of the recorded video may not be accurate.

COMPONENT VIDEO
Video signal in which luminance and synch information are recorded separately from the color information. Formats such as SVHS and Hi-8 use component signals to achieve maximum quality. Component video comes in several flavors: RGB (red, green, blue), YUV (luminance, sync, and red/blue) and Y/C (luminance and chrominance). Y/C is also called S-Video and used in the S-VHS and Hi-8 formats.

If your camcorder and VCR/Editing device have S-Video capability then it is better to use this connector rather than the standard composite video connections because the signal quality via S-Video is better.
**COMPOSITE VIDEO**
A video signal in which the luminance and chrominance elements have been combined in formats such as VHS.

**COMPRESSION**
The process of manipulating video signals so that they require less storage on a computer hard drive. It takes about 12 gigabytes to store one hour of broadcast quality analog or high-resolution digital video. Compression can reduce this size dramatically, but this can result in an unacceptable deterioration of picture quality.

Compression can be performed by run length encoding similar values (i.e. a large number of consecutive pixels in a frame with the same color), reducing the frame size, reducing the number of frames per second (normally 30), reducing color content, reducing sharpness, or a combination of all of the above.

For most video editing applications that have to produce an acceptable quality video tape as the end product, virtually no compression of the input video source is acceptable.

**CONTROL-L**
Sony's editing control protocol, also called LANC (Local Application Control), which allows two-way communication between a camcorder or VCR and an edit controller. This feature is included on most Sony, Canon and Sony OEM (Ricoh, Fuji etc) products.

LANC is an almost essential requirement when using video editing equipment such as Pinnacle’s Visual Studio 400.

**CONTROL-M**
Panasonic 5-pin edit control protocol. Similar to Control-L, but not compatible, and is not as widely supported by edit controllers.
CONTROL-S

Sony transport control protocol which duplicates a consumer VCR's infra-red remote transport control. Unlike Control-L, Control-S does not allow the controller to read tape counter information. Desirable to have in your VCR, but not as important as LANC for successful video editing.

DIGITAL

A system whereby a variable analog signal is broken down and encoded into discrete binary bits of ones and zeros. These numbers represent a mathematical model of the original signal. When copied, they do not degrade as an analog signal does. An analog-to-digital (A/D) converter chip takes samples of the signal at a fixed time interval known as sampling frequency. This digital stream is can be recorded onto magnetic media. Upon playback, a digital-to-analog (D/A) converter chip reads the binary data and reconstructs the original analog signal.

Theoretically this process should eliminate generation loss since every copy is an exact duplicate of the original. In reality, digital systems are not perfect and can introduce their own problems in maintaining the original signal. However digital signals are virtually immune to noise, distortion, cross-talk, and other quality problems.

DIGITAL-8

A digital encoding system used by Sony that records a video signal is digital format on 8 mm and Hi8 tapes. The data is recorded at double speed (i.e. a 2 hour tape will contain 1 hour of digital video). The signal presented at the ILink (IEEE-1394) interface is industry standard and for all intents and purposes, a D8 camcorder functions the same as a DV camcorder. However, the D8 camcorder has the ability to playback 8 MM and Hi8 analog recordings and these can be captured via the IEEE-1394 port as if they were recorded digitally. D8 camcorders represent a lot of value when making the transition from analog to digital, as the existing inventory of 8 mm and Hi8 video can be captured and edited digitally, and the existing inventory of 8mm and Hi8 tapes can be reused for digital recording.
DISSOLVE
A video or film transition where one shot gradually fades out while a second shot fades in.

DROPOUT
A defect on the videotape which causes a brief flash of a horizontal black line on the screen. Commonly found at the beginning and end of tapes. The quality of videotape is graded by the number of dropouts and priced accordingly.

DROP FRAME
A type of time code designed to exactly match the real time of common clocks. To accomplish this, two frames of time code are dropped every minute, on the minute, except every tenth minute. This corrects for the fact that video frames occur at a rate of 29.97 per second, rather than an exact 30 frames per second (see FRAMES, NON-DROP FRAME & TIME CODE).

DUB
Duplicate copy of videotape. If the source tape is analog that the duplicate will be of a lesser quality as the original due to generation loss.

FADE
A video picture that gradually increases or decreases in brightness usually to or from black. Sound can also fade to or from silence.
FIELD
One-half of a television frame, containing all the odd or even scanning lines of the picture. In NTSC 262.5 horizontal lines at 59.94 Hz. In PAL 312.5 lines at 50 Hz.

FOCUS
An auto focus system comes with all camcorders. The camcorder tries to determine the subject of your video and focuses in on that subject. The accuracy of the auto focus can be affected by extreme or low light. Generally there is a manual override that allows you to adjust the focus manually.

FORMAT
Describes the video equipment and tape used. Popular formats listed in ascending order of cost and quality include VHS, 8-MM, SVHS, HI-8.

FRAME
A complete television picture made up of two fields, produced at the rate of 29.97 Hz (color NTSC), or 30 Hz (black & white NTSC).

GENERATION LOSS
Created when editing or copying one analog videotape to another videotape. Most apparent in less expensive video formats. Theoretically absent from digital video editing.
**HI-8**

A video format technically similar to SVHS which uses smaller cassettes, and has a horizontal resolution of 440 lines, compared to 330 lines for broadcast television. The 8mm video format is a similar sized cassette but is of an inferior quality of 270 lines of resolution. VHS video has a resolution of 230 lines, similar to 8mm, but 8mm provides vastly improved audio quality and better noise and dropout ratios. All camcorders that support HI-8 will also record and play back 8mm tapes.

**IMAGE STABILIZATION**

Used to eliminate some of the shaking that most people will do with their hand while recording. There are two types of image stabilization. The first type is optical image stabilization and uses different lenses and gyros to adjust for any motion or movement that doesn't seem natural. The other type is electronic/digital image stabilization. It adjusts for when the camcorder is shaking but does not overcompensate for when you pan or tilt the camera. Optical is probably the best, but both are very good, and an almost mandatory feature of a camcorder.

**IEEE-1394**

IEEE-1394, also known as firewire and ILink, provides a high speed serial interface to computers that is more than capable of meeting and exceeding the high bandwidth requirements of Digital Video (DV). This interface is the industry standard for the capture and export of all DV, and is included in all DV camcorders. It enables the computer to control the camcorder functions and initiate such activities as import/capture and export/record. The continuous bandwidth requirements for DV is around 3.8 megabytes per second, which is only a small portion of the total bandwidth offers IEEE-1394. Other devices such as disk drives are available that support the IEEE-1394 interface.

**LAVALIERE**

A small microphone that is clipped to a person's clothing.
LTC
Longitudinal Time Code. Type of time code recorded on one of the audio channels of video tape. Requires tape movement
to read. (See also VITC.)

LINEAR EDITING
The process of editing video from one tape to another by copying sequential scenes, trimming or deleting portions of each
scene in the process, and also including additional video effects, audio soundtracks and sound effects. The process
involves very little stopping and starting of the playback and record devices.

LUMINANCE
The monochrome portion of a video signal.

LUX
This is the term used to describe the rating used for CCDs. It is the minimum amount of light needed to be put through a
CCD and still create a recognizable picture. Bright daylight is about 100 LUX and the light from a candle is about 10
LUX. The ability of a camcorder to operate below 5 LUX is of little value, as the quality of the video, even at 10 LUX will
be very grainy.

MACRO FOCUS
Regular lenses have a minimum focusing distance that doesn't let you focus in on a small object at close
distance. A macro focus capability, available on some camcorders, will let you take a close up of a small object.
This feature is nice to have but not widely used in most run of the mill video assignments.
MATCH FRAME EDIT
An edit in which the source and record tapes pick up exactly where they left off. Often used to extend or correct a previous edit. Also called a "frame cut."

NTSC
National Television Standards Committee created this first international television system for use in the U.S. and other countries. It produces pictures by creating 525 alternating lines across the TV screen for each frame of video. Since PAL and SECAM, the other two world systems, were developed later, they took advantage of better technology.

NON-DROP FRAME
A type of time code that continuously counts a full 30 frames per second. As a result, non-drop-fame time code does not exactly match real time. See also DROP FRAME.

NON-LINEAR EDITING
The process of copying scenes from one or more video tapes to another tape in a non sequential order. Individual scenes may be trimmed during the process, and other visual and audio effects added, as well as additional sound tracks. This process normally involves stopping and restarting both the playback and record devices frequently.

PAN
Movement of the camera on a horizontal axis.
RGB
Red, green & blue, the primary color components of the additive color system used in color television.

SVHS
Super VHS. A video format developed by JVC. It is equivalent to HI-8 in capabilities but is not widely supported or available in consumer class camcorders. However, it is a popular format for VCRs.

SHOTGUN MICROPHONE
A highly directional microphone that may be hand-held or mounted on a boom.

SHUTTER SPEED
There is no shutter in a camcorder, but is used as a term to define how quickly a frame is exposed/processed by the CCD. The normal speed is 1/60 of a second. This might cause fast moving objects to come out a little blurry. A faster shutter speed can help you catch these faster moving objects. The drawbacks are that less light is let in, and therefore less picture quality. It is a good idea to use this feature only in well lit conditions. For camcorders that support variable shutter speeds, they range from 1/60 to 1/4000 or 1/10000.

TARGET AUDIENCE
The intended viewers. Successful videos should define and address this audience.
TILT
Movement of the camera on its vertical axis.

TIME CODE
A system of numbering each frame of video with a unique address divided into hours, minutes, seconds and frames. There are 30 video still frames per second. See also DROP FRAME, NON-DROP FRAME, VITC, LTC.

VCR
Video Cassette Recorder.

VHS
Video Home System. The most popular consumer video format used in the majority of home VCRs.

VITC
Vertical Interval Time Code pronounced vitSEE. This type of time code is recorded in the vertical blanking interval above the active picture area. Can be read from video tape in the "still mode." See also LTC (Longitudinal Time Code).

VTR
Video Tape Recorder.
**WHITE BALANCE**

A color camera function which determines how much red, green and blue is required to produce a normal-looking white. Shots made with improper white balance will have an abnormal color tint. Most modern camcorders have an automatic white balance function. However it is important to point the camcorder (in record/standby mode) at a pure white object whenever light conditions are changed to ensure that the white balance is adjusted correctly for these new conditions.

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**WIPE**

A visual transition between shots in which the first shot is replaced with the next via a moving pattern.

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**ZOOM**

To vary the focal length from one size to another, making the subject appear closer or further away. Most camcorders today provide both an optical and a digital zoom capability. Optical zoom is performed by varying the focal length of the camera Lens. Optical zoom capabilities range from about 10X to 22X or 10 – 22 times the magnification. Digital zoom magnifies the image by increasing the number of pixels used for each point in the image. For example, if 4 pixels are used to represent a single pixel than the zoom factor would be 4X. This feature is similar to zooming an image in a graphics editor program. Digital zoom results in such a loss of sharpness and detail that its usefulness is limited. Camcorder digital zoom capabilities generally range from 30X to 300X.
Lesson 1:

Tips for Shooting Video

If You Plan to Edit

1. Whether you use VHS, VHS-C, 8mm, Hi8 or MiniDV, remember to record in the "SP" speed. You will have better quality video, editing will go faster and you will end up with better duplications.

2. Before shooting, always leave at least 15 seconds of black (no video or audio) at the very beginning of the tape. Most video tape wear occurs where it loads against the video heads of your equipment. If damage should occur, it would be in black, not in your video.

3. When shooting, start recording early and keep recording a little past where you want to stop. Avoid leaving "snow" or no video on your tape. Start your next shot in the video of the last.

4. Don't tape your subject in front of a window or bright light - it will make your subject dark. Always try to have lights behind you, so they will illuminate your subject.

5. Avoid using auto-focus if you will have people walking in front of the camera or if your subject is much closer than your background.

6. Use a light. Unless you are outside on a sunny day, a camera light or other light source will improve the quality and color of your video.

7. Use a tripod whenever possible. It will keep your shots more stable and make your tapes more enjoyable to watch.

8. If your audio is important, you will get better results with a separate microphone. Your audience will be able to understand and enjoy the audio you record without the ambient noise that can come with a camera microphone.

9. When you are finished shooting, pull the record tab to prevent accidental erasure. Also, be sure to label your video tapes with dates and descriptions of its content.

See:

Videomaker Magazine, August 2001, Home Video Tips, by Jim Stinson
http://www.kn.pacbell.com/wired/fil/papes/listvideoshpd.html

An Internet Hot list on Video Shooting Tips
created by West Haven High School

Pete's Video, Video Shooting Tips
http://www.petesvideo.com/vidtips.htm
Lesson 1 Continued: Pete’s Video
http://www.petesvideo.com/vidtips.htm
Video Shooting Tips

Good video begins with good camera work. If you are serious about improving the quality of your video efforts, I strongly recommend
that you get down to your local library and check out some of the books available on making videos.

They are full of lots of good information, with hints and tips on how to use your camcorder to shoot good video. However I have a few
do’s and don’ts that I will reproduce here.

ZOOMING

Keep your finger off the zoom. This is a cool feature available on virtually every camcorder and allows you to bring your subject
closer. It is neat to play with. However, it is not so cool to watch in a video, and if you overdo it your audience will be pop-eyed and
seasick.

A slow zoom is useful to create an illusion that the subject is moving towards the camera. An alternative way to accomplish the same
effect is for you to move the camera towards the subject, but it is more difficult to maintain as smooth a motion. Two zooms per hour
of edited videotape is about one zoom too many.

Where the zoom is very useful to establish a wide angle location shot. Then you stop recording, zoom in for a close-up on the action,
and then start recording again. Zoom is also very useful to blur the background around the subject. How much of the scene is in focus
is referred to as the depth of field, and is dependent on the focus length of the lens. As you vary the focus length by zooming in or
out, you vary the depth of field where the objects in the frame are in focus.

The larger the magnification, the smaller the depth of field. Therefore if you want a shot where the subject is in focus and the
background is not, then you would use a high zoom factor, and shoot from a distance away. Inversely if you want both the subject and
the background in focus, then you will move the camera closer to the subject and not use zoom at all.

DIGITAL ZOOM

Most camcorders today provide both optical and digital zoom capabilities. The optical zoom works by changing the magnification
factor of the lens and is of high quality. Digital zoom functions by increasing the number of pixels utilized for each point in the frame,
and results in a much poorer quality picture. Digital zoom is applied after the frame is captured. If four pixels are then used for each
captured pixel than a 4X digital magnification has been performed. 32X, 72X and even 300X digital zooms are common.
Digital Zoom is more gimmicky than it is useful. The problem with digital zoom is the rapid loss of detail and sharpness. Even at only 32X, I find that the resultant video is very poor and virtually unusable. It is of value for that once in a lifetime shot where it is impossible to get the shot any other way. For day to day work, look for a camcorder that has a good optical zoom and leave the digital zoom disabled. My camcorder has a 16X optical zoom, and I have found that this is more than adequate.

FRAMING

It is important to make sure the subject you are shooting is positioned correctly in the video frame. You don't want the subject to be dead center in the frame. The center of focus needs to slightly left or right, up or down off of dead center. The diagram illustrates what frame positions are best.

You need to make sure that you leave “headroom” for your subject, as shown in the picture. You don’t want him to look like he’s hitting his head on the ceiling.
You also need to allow room in the frame for movement. Create the appearance that people on the move are moving into the frame and not out of it.
When doing three-quarter or close-up shots of people, don’t cut people off at their elbows or knees. If you can see their elbows or knees include their hands and/or feet, or frame the shot so that the elbows and knees are not in the frame.

PANNING

A horizontal or vertical pan is a good technique to include more of a scene into a video than is possible from a stationary camera angle. However, make sure to do this very slowly, or your audience will get dizzy from all the movement. When doing a horizontal pan it is important that your feet do not move. If you move your feet, there will almost certainly be a jerk in the camera movement as you do so.

The best technique of course is to use a tripod. However, if you are holding the camera and wish to take a pan shot, try the following. Position your feet in the direction where the pan is to complete. Swivel your body to the left to the beginning of the pan without moving your feet. Slowly move your body back to the end point while recording, keep your feet stationary. Stop recording when you have reached the final position.
THE WHITE BALANCE

When moving from one lighting condition to another, such as from outside in bright sunlight to inside with incandescent lighting, it is important that the white balance be adjusted correctly, or the color tints will not be accurate. With most camcorders, white balance adjustment is automatic. However, the camera requires a pure white reference source to adjust correctly.

It is a good idea to allow the white balance to adjust correctly by pointing the camera at a white object (like a tee shirt) in record/standby mode before you begin shooting in the new light conditions. I wrap my camcorder in a white tee-shirt while it is in my camera bag, and then I always have something white available.

WORKING WITH THE MANUAL CONTROLS

Most camcorders automatically set the focus and exposure, and do a good job of it for most situations. However, it is important that you know how to override the automatic controls for focus and exposure and set them manually.

MANUAL FOCUS

When shooting through an object, such as a window or a fence to take the subject, the automatic focus may focus on the wire or a reflection off the glass. Manually focusing on the subject will ensure that the reflections or wire fence is blurred or not visible while the intended subject is in sharp definition.

Also, if there are large objects in the field of view, the camera may automatically focus on them rather than your intended subject, leaving it a little fuzzy. You can use manual focus to make sure the intended subject is sharp. Another method is to zoom in close on the intended subject so that it fills the frame. The auto-focus will adjust to the subject. Now zoom back out to the correct framing, and the subject will remain in focus.

MANUAL EXPOSURE

Generally your camcorder will do a fine job of automatically setting the correct exposure, and there are normally some special setting such as backlight that you can use to adjust for special situations. However, there are conditions when you might want to set your own exposure. An example is when taking a pan shot of a room that has windows during the daytime. With automatic exposure, the camcorder will adjust to the bright light it sees as the pan reaches the window, making the rest of the room appear darker. By manually setting the exposure so that the room and its objects are correctly exposed, this will not happen.
SOUND

During the editing process, you can add voiceovers and background music. However, if you are taking video of a person talking, you will need to use the camera microphone or an external microphone. Where possible, it’s best to use an external microphone. A lapel microphone (available from Radio Shack and other places) is a good choice. It is also useful when you (the cameraman) are doing narrative while holding the camcorder and taking the shot. The in-camera microphone does not pick up well from behind the camera.

When you are shooting and it is windy, make sure that you have the camera microphone's wind filter engaged if you intend to use the background sounds captured in the final product.

IMAGE STABILIZATION

It’s a good idea to have image stabilization engaged at all times, unless the camera is mounted on a tripod. To see how important this is, try shooting some scenes while holding the camcorder as steady as possible with image stabilization turned off. You will find it is virtually impossible to maintain a steady picture.
Lesson 2:

SHOT:
The word shot refers to a basic unit of film; one uninterrupted piece of celluloid without a cut. In Digital Video the term refers to a single scene shot without a break, and uncut.

BEGINNING SHOT LIST

Establishing Shot: Often coming at the beginning of a scene, the establishing shot sets the time and place of the action. It is often the outside of a building or a view of a city.

Long Shot (LS): A long shot is generally made from a sufficient distance to show a landscape, a building, or a large interior. Often, an establishing shot is a long shot.

Medium Shot: Generally, a medium shot leaves enough room in the frame to reveal full figures. It can, however, be a “waist up” shot involving several people.

Close-up (CU): The image being shot (usually a face) takes up at least 80% of the frame.

Extreme Close Up: An extreme close-up reveals only one part of the body or a portion of an object.

BASIC CAMERA ANGLES

Each shot is framed according to specific camera angles. The camera angles add drama and emphasis to the visual story.

Camera Angles:

Eye-level (EL): An eye level shot is even with the characters’ eyes. 90-95% of a film is shot at eye-level because it is the most natural.

Low Angle (LA): The camera looks UP at what is being filmed. This has the effect of making the subject look larger than normal and implies strength, power, or a threat.

High Angle: The camera looks DOWN at what is being filmed. This has the effect of making the subject look smaller than normal, weak, powerless, trapped.

Additional Tips:

1. The camera enables the filmmaker the advantage of “Forced Perspective.” In a play the audience can look at any place on the stage. In a movie, the audience sees ONLY what the director wants them to see.

2. Camera angles give the director the advantage of picking the perspective the viewer will have of a scene.

3. Reducing the space around the action will amplify the feeling of action by making it seem to take place within a confined area. Make sure that some action shots are close to the actors and action so there is less space around the edge of the scene.

Assignment: Use the information from Lessons 1 and 2 to create a Do’s and Don’ts list.

Shoot 5 minutes of video illustrating 5 Do’s and Don’ts.
Lesson 3:
Script Writing Summary:
- All film stories are remakes or variations of stories that have already been written by the great authors beginning with the Greek Myths.
- Start your script by using a short story and giving it a new twist. Set it in a different time, a different location or different characters.
- Pick something you have time to do and don’t try to remake a feature film.
- In all stories, the Protagonist (Hero or Main Character) WANTS something.
- Comedy: When the Protagonist gets what they want. A comedy does not have to be funny. The word comedy merely means a Happy Ending.
- Tragedy: When the Protagonist does not get what they want. Unhappy Ending.

Story Planning Guide:
1. List all characters:
2. Describe the protagonist.
3. Describe what the protagonist wants.
4. List the sequence of events.
5. List the problems the protagonist will encounter.
6. Describe the theme of the story and describe what makes it a Comedy or a Tragedy:
Lesson 4:  
http://www.learner.org/exhibits/cinema/editing2.html

Film Editing Glossary

cut  
A visual transition created in editing in which one shot is instantaneously replaced on screen by another.

continuity editing  
Editing that creates action that flows smoothly across shots and scenes without jarring visual inconsistencies. Establishes a sense of story for the viewer.

cross cutting  
Cutting back and forth quickly between two or more lines of action, indicating they are happening simultaneously.

dissolve  
A gradual scene transition. The editor overlaps the end of one shot with the beginning of the next one.

editing  
The work of selecting and joining together shots to create a finished film.

iris  
Visible on screen as a circle closing down over or opening up on a shot. Seldom used in contemporary film, but common during the silent era of Hollywood films.

jump cut  
A cut that creates a lack of continuity by leaving out parts of the action.

matched cut  
A cut joining two shots whose compositional elements match, helping to establish strong continuity of action.

montage  
Scenes whose emotional impact and visual design are achieved through the editing together of many brief shots. The shower scene from Psycho is an example of montage editing.

rough cut  
The editor's first pass at assembling the shots into a film, before tightening and polishing occurs.

sequence shot  
A long take that extends for an entire scene or sequence. It is composed of only one shot with no editing.

shot reverse shot cutting  
Usually used for conversation scenes, this technique alternates between over-the-shoulder shots showing each character speaking.

wipe  
Visible on screen as a bar traveling across the frame pushing one shot off and pulling the next shot into place. Rarely used in contemporary film, but common in films from the 1930s and 1940s.
Lesson 5:
Developing Story Ideas

http://www.writersstore.com/article.php?articles_id=68

Five Secrets to Writing Screenplays that Sell by Michael Hauge

This past summer (1999) 12 movies earned more than $100 million at the U.S. box office. Though they ranged from low budget horror to big budget sci-fi western, and included romantic comedy, broad comedy, children's special effects comedy, mystery thriller, occult thriller and a classic animated love story/adventure, they all had five things in common:

1. Each one had a HERO, a main character we rooted for, and whose motivations drove the story forward;

2. We IDENTIFIED with the heroes, we put ourselves inside those characters psychologically, and experienced emotion through them;

3. The heroes each pursued at least one clear, visible DESIRE, which they had to accomplish by the end of the film, either by stopping the bad guy, winning the love of another character or saving a terrorized child;

4. They faced seemingly insurmountable OBSTACLES in pursuing their goals; and

5. In facing those obstacles, they had to find more courage than they'd ever exhibited.

As I outline in great detail in 'Writing Screenplays That Sell,' these are the five ESSENTIAL components nearly all Hollywood movies contain, and there are proven ways of effectively employing these elements in your screenplay. Without them, your script will have a much more difficult time getting sold, getting made or reaching your intended audience.

Additionally, two simple questions will do an immense amount to strengthen both the story and character development in your screenplay:

1) WHAT IS YOUR HERO'S DESIRE? What compelling goal does your hero HAVE to accomplish by the end of the movie, and why does he desperately want that? The answer to these questions will define your story concept, propel the plot forward, give the reader a specific outcome to root for and lead you deeper into the inner motivations of your character.

2) WHAT TERRIFIES YOUR HERO? On the plot level, this question will force you to determine which obstacles the hero must face to achieve his objective -- what's at stake for him, what's he up against and which conflicts will give the story its necessary emotion? And on the level of character growth and theme, your hero's emotional fear will reveal his inner conflict: the wounds from his past, the identity he clings to, the risks he is desperate to avoid and the arc the story will lead him through as he finds his necessary emotional courage.

Michael Hauge is a studio script consultant, screenwriter and author who has made his living in the Hollywood film industry since the mid-seventies. He has recently coached writers or consulted on projects for Warner Brothers, Disney, New Line, Propaganda Films, Fireworks Entertainment, CBS, Lifetime, Morgan Freeman, Jennifer Lopez, James Caan and director Luis Mandoki.

Michael's award-winning book ‘Writing Screenplays That Sell,’ is a definitive reference book for the film and television industries.
Lesson 6:
Storyboarding

Storyboarding is the process of producing sketches of the shots of your script. The end result looks like comic book of your project (without the speech bubbles). Text can be inserted under the image frames on the storyboard sheet.

Why do it?
It helps you think about how your project is going to look. You can work faster as pictures communicate better than words it will guide the final assembly process to map it out visually beforehand.

So I need to be an artist?
Well you can be, but looking at storyboards by Hitchcock or Spielberg you have to admit that they can't draw. Your can use printed copies of photos you plan to use or you can just do sketches, but however you decide to work, it is a good idea to bash storyboards out yourself even if you don’t draw well. This is a thinking exercise that allows you to experiment quickly and cheaply with ideas, testing out different versions of how a sequence may look before spending valuable time on the computer.

(See Storyboarding Form)

Lesson 7:
Download and Editing Exercises

Download and Edit your first video project.

Working with iMovie, choose select clips to edit together to tell a concise story.

Working in Premiere, practice bringing clips into the project window, placing them on the video timeline and adding appropriate transitions.

Create 3 versions of the same edit using different transitions to tell the appropriate story.

Review Film Editing Glossary
Annenberg/CPB Learner.org
http://www.learner.org/exhibits/cinema/editing2.html

Lesson 8:
Re-shooting Final Film Scenes

Tips to Keep in Mind

Where Are You?

Recreating the scene:
One tip while shooting is to always, always look for a landmark, a sign or natural monument that tells the audience where you are. Do you notice the professionals do this as well? For example, in the movies, you may see the camera zooming in on the Statue of Liberty first, before cutting to a scene that happens within. Or there is a shot of the White House before the director cuts into a scene within the Oval Room.

When re-shooting, be sure to use these landmarks to help you recreate scenes that will edit seamlessly into your final production.

Lighting:
Of all the factors listed here, nothing spoils a video shoot as much as poor lighting. Shoot video with the light source behind you, shining on the subject outdoor shot where the sun is shining.

When re-shooting a scene, always check to be sure you are working with the same indoor lighting or that you are re-shooting at the same time of day if you are working outdoors.
Lesson 9: Digital Video Editing Tips
By Michael Wohl
http://www.techtv.com/screensavers/answertips/story/0,24330,3393081,00.html

Here are some tips that can help you with your digital editing projects, no matter which editing program you use:

1. Every cut must provide new information. Don’t make an edit unless something in the content compels you to. And the new shot should reveal something that was not evident in the previous shot.

2. Don’t neglect your soundtrack. If seeing is believing, then hearing is feeling. Although sound is literally invisible, the details of your audio will affect the impact of your scene in ways far beyond what the pictures will. Good sound design is usually the difference between a good film and a great one.

3. Don’t try to do everything yourself. Many young editors think that they can do it all themselves. In addition to editing the picture, they take on special effects, audio sweetening, titles, and so on. Go to the movies and count how many folks are listed in the credits. Above everything else, movies are a collaborative medium.

Lesson 10: Output final Video
Adobe Premiere 6.0
Review of New Features
By Mick Lockey

Premiere 6.0 comes with the obligatory timesaving interface tweaks that grace most version updates. Labels and buttons have been added to the Source and Program Views for quicker toggling between the two. And instead of going to a separate menu to supply markers in the Source and Program View windows, you can cut down on editing time by placing markers right in the windows.

Improvements for the Timeline window, where more precise edits are done, include new toggle buttons for quicker access to commonly used editing features and a new menu for finding and executing commands quicker.

Premiere 6.0 allows users to export edited clips, timeline segments, and larger projects into a variety of file formats such as QuickTime, RealMedia, ASF, MPEG-1, MP3, and DV stream, all of which can then be played on the Web. Users can also export the video files for playback in Windows Media 7, in Real Media, or within the Adobe Premiere application itself. With a plug-in from Real, anyone interested in seeing the video can download edited files from the Web directly to their hard disk.

Audio integration has been greatly improved in the new version with the addition of an Audio Mixer. It looks like an average audio mixing console, with a VU meter, a volume fader, and Pan control for stereo. While in the Monitor window, the feature allows user to mix up to 99 audio tracks while coordinating sound to synchronize with the video. Users can easily automate audio adjustments for each track, or they can manually tweak each track in the Timeline window by dragging the volume rubber bands in each clip.
Handouts

1. Evaluation Form, Sunshine State Standards
2. Evaluation Form for Student and Teacher Evaluations
3. Consent Form
4. Release Form
5. First Activity - Beginning Shot List Form - 2 Pages
6. Second Assignment - 5 Minute Script Form - 2 Pages
7. Minute Script Form - Shot Requirements
8. Movie Critique Form - 4 Pages
9. Movie Proposal Form
10. Storyboarding Form
**Evaluation Form with Sunshine State Standards**

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<thead>
<tr>
<th>Standards</th>
<th>Criteria</th>
<th>Teacher evaluation</th>
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## Evaluation Form for Student and Teacher Evaluations

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CONSENT FORM

This form must be completed and signed for each recognizable person in the photograph or video

Date:_______________  Title: ___________________________________________

I hereby irrevocably consent that this work may be entered in an exhibition, contest, used for publication, sold and/or displayed in any manner:

Signature of Subject: _____________________________________________________

Address (Street or P.O. Box)___________________________________________________

City:__________________________  State: __________________  Zip: ______________

____________________________________________________________________________

Signature of Witness (or guardian, if subject is under 18)

____________________________________________________________________________

Address (Street or P.O. Box)___________________________________________________

City:__________________________  State: __________________  Zip: ______________
RELEASE FORM

For consideration received, I give permission, without restrictions, to _______________________
and (The Institution)___________________________, their successors and assigns to distribute and sell, for any and all
motion picture, videotape, and television purposes, still photographs, sound motion pictures and tape recordings taken of
me for a film and video tentatively titled:___________________.

This grant shall extend to any and all phases of the exploitation of the film, including publicity, promotion, and advertising,
all the right to use my name in connection therewith.

Signed: ___________________________________________________________________
Date:_______________ Title: _________________________________________________
Address (Street or P.O. Box)____________________________________________________
City:__________________________ State: __________________  Zip: ______________
Phone: (______)  _____________________
Introduction to Cinematography

Cinematography One - First Activity - Beginning Shot List

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<th>Course Name</th>
<th>Student Name</th>
<th>Date</th>
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- Be careful to allow plenty of time of each shot - 10 seconds minimum for single shots and 5 seconds for each part of the combination shot.
- Make creative examples of the shots.
- Direct talent to do something that has ACTION, not reading a book, sitting, thinking!
- Create smooth transitions between “combination” sequences. Each sequence should look like one smooth, continuous action even though it is created with several different shots.
- The action should be in front of the camera, not camera movement. Camera movement should only be used for a special effect. If the camera moves and it is not appropriate for the shot, the movement breaks “The Magic Spell” of the movie for the viewer.
- Remember, each part of the “Sequence” shot should be a minimum of 5 seconds. The shots should combine together to create a seamless account of one particular action, even though it is being shot from different angles, etc.

1. One master shot of an outside area and one master shot of an inside area.
2. One shot from inside a window of talent doing something outside the window.
3. One shot from outside a window of talent doing something inside the window.
4. One medium shot and one close-up shot from a different camera angle of talent doing an action, such as jumping rope, dancing, etc.
5. Use another location: One master shot, one medium shot, one close-up shot from a different camera angle of talent engaged in some action.
6. High Camera Angle: One shot from above of talent engaged in some action.
7. Low Camera Angle: One shot from below looking up at talent engaged in some action.
### 8. Combination Sequence:

A. Talent enters frame executing a straight cross including one full action (skiing, dancing, picking something up, etc.) Talent does not exit the frame.
B. One matching shot of feet during the action shot as a close up.
C. A long shot of the action continuing until the actor is out of the frame or until the action is over.

### 9. Combination Sequence:

A. Full shot of two people facing each other and doing something together (like playing cards.)
B. One over the shoulder shot (seen from first actor’s point of view.)
C. Another over-the-shoulder shot (seen from first actor’s point of view.)
D. One Extreme Close-up

### 10. Combination Sequence:

A. One shot of talent enters frame from around the corner and walks toward the camera.
B. Talent walks into camera until all details disappear.
C. Same talent begins close to camera (no details) and walks away from the camera.

### 11A. Combination Sequence:

(Shot from outside or in a hallway.)
A. One full shot of talent as he/she approaches a door.
B. One medium shot of talent getting close to the door and reaching for the door handle.
C. One close-up shot of talent turning the door handle and starting to pull the door open.
D. One full shot of talent opening the door and walking a few steps into the doorway but not from inside the room.
(Shot from Inside the room.)

### 11B. Combination Sequence:

(Shot from inside the room.)
A. One full shot of talent as he/she crosses the threshold and enters the room as you see the door closing behind the talent.
B. One shot of talent moving away from the door, camera pans as talent enters the room and sits down or completes some action.
Create a 2 to 5 minute script/story that incorporates the shots listed in point 5 of this handout.

1. Main Character Name & Description:

Character Wants:
Because:

2. Obstacles:
The main character will encounter and usually solve several obstacles, but they will not get what they want until the end of the movie, if at all. The final obstacle determines if:
- They get what they want
- They do not get what they want

(You may have 2 or more obstacles before the final obstacle at the end of the movie, but the movie can be no longer than 5 minutes.)

Obstacle #1. And how the character solves the problem:

Obstacle #2. And how the character solves the problem:
3. Final Obstacle. And how it is solved or why it isn’t:
____________________________________________________________________________________________________________________
____________________________________________________________________________________________________________________

4. How the actor is affected because of the success or failure to get what they want?
____________________________________________________________________________________________________________________
____________________________________________________________________________________________________________________

5. Scenes: (Minimum of 3):
A scene is the action that occurs in one location (hallway, patio, art room, etc.) Describe the master shot and setting for each scene and explain what happens in each scene.
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Introduction to Cinematography

Minute Script Form - Shot Requirements

Required Shots:
These may be shot in any sequence the story requires:

1. An Entrance: an actor entering and exiting through a door including the actor approaching the door, a close up as the actor turns the doorknob, the actor going through the doorway, and the actor leaving the doorway and entering the next room or outside.

2. A Straight Cross: including one full Action shot (dancing, crawling, etc.), then a close-up of the feet, and a full shot of the actor exiting the location that takes up where the action left off after close-up.

3. High Camera Angle: An unusual Bird’s Eye View.

4. Low Camera Angle: An unusual Worm’s Eye View.

5. Medium Shot: An unusual Eye Level View:

6. An around the corner shot:

7. A shot taken from outside a window of the action that occurs inside.

8. A shot taken from inside a window of the action that occurs outside.

9. Two over the shoulder shots

10. Two Close-up shots

11. Two Medium shots

12. One Extreme Close-up
## Movie Critique Form

**Name:** ___________________________________________________  **Date:** __________________  **Period:** __________________

**Movie Critique:** A critique is due each week on the first day of the class.

### 5 Points

**MOVIE TITLE:** ____________________________________________  **Date of Movie:** __________________

**Director:** ___________________________  **Writer:** ______________________________________

**Art Director:** ___________________________  **Genre:** ______________________________________

**Director of Photography:** __________________________________________________________________

### Ten Points

**SETTING:** Describe the most important points about the setting and describe how it enhanced the plot.

<table>
<thead>
<tr>
<th>Setting Description</th>
<th>Enhanced Plot</th>
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<tbody>
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20 Points

MAIN CHARACTER: Answer the following questions for each main character.
4. Who are the characters? (Gender, age, profession, personality, etc.)
5. What does the character want?
3. How does the character add to the development of the story? What is the importance of the character to the story?
20 Points

**PLOT SUMMARY:** Summarize the plot and include the obstacles that prevent the characters from getting what they want.

____________________________________________________________________________________

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____________________________________________________________________________________
Introduction to Cinematography

Movie Critique Form – Page 4

15 Points
THEME: Summarize the main theme, mood, moral – This is not a plot summary.

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

10 Points
WHAT IMPRESSED YOU? Be specific:

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

20 Points
TECHNICAL: Describe the most unique technical elements and tell how they are used to enhance the story or mood.

_________________________________________________________________________
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Movie Proposal Form

<table>
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<tr>
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<th>Period</th>
<th>Date</th>
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<th>Character Wants:</th>
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<td>Time:</td>
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<tr>
<td>Other</td>
<td>Relationship to the Main Character</td>
<td>Contribution to the story</td>
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<td>Characters:</td>
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<td>Character B.</td>
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<td>Character C.</td>
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<td>Character D.</td>
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Obstacles:
- Describe Obstacle
- How is it solved or why is it not solved

Resolution:
- Describe the end of the story. What happens when the Main Character gets or doesn’t get what they want?
- How is the Main character affected by the result? Getting or not getting is not a resolution. Resolution describes how the character is affected.
Introduction to Cinematography

Storyboarding Form

PROJECT TITLE_________________________  STUDENT NAME_____________________

[Blank storyboard form with 20 boxes arranged in a grid]

-48-
TUTORIALS
Tutorial 1
FILE MANAGEMENT:

Storing Still Images, Video and Audio clips:
1. To keep track of the elements of your project, be sure to store all project elements in a main Work Folder.
2. Name the folder with your own name to keep it distinct from other folders.
3. Within the Work Folder with your name, create individual Sound and Image Folders to store:
   - video clips
   - still images
   - audio clips or sound files
   - Digital Video Project
4. As you work, rename images, video clips and sound files in the sequence in which they will be used and store them in the Digital Video Project Folder.

(See Illustration Next Page)

Backing Up Your Work:
1. Be sure to back up your work to a zip disk or other storage medium after each work session.
2. After each Back up, delete all your files from the computer hard drive.
3. Do not leave work on the computer hard drive because it overloads the hard drive memory.
4. This slows down the computer making it difficult to work. 
   **WARNING**
5. When this happens, and other students projects are slowed down, students who need the work space are allowed to delete files created by others.
FILE MANAGEMENT

Use Your Name to Title
Your Work Folder

Image Folder  Sound Folder

Create Image and Sound Folders inside your Work Folder
Introduction to Cinematography

Tutorial 2
Moving from iMovie to Premiere

**iMovie**

When you open iMovie:

a. iMovie opens an uncomplicated, effective beginning nonlinear video editing system.

b. iMovie Bin (Project Window) which holds content is located on the upper Right. (Bin is a term dating from early film production in which the strips of film were assembled over a bin for viewing and manual clipping and splicing.)

c. iMovie Monitor Window is in the Upper Left side of the screen.

**Premiere**

When you open Premiere:

a. Premiere provides a more sophisticated approach to editing, but the interface really does not differ greatly from iMovie.

b. Premiere Bin (Project Window) is located in the upper Left..

c. Premiere Monitor Window is located by default in the Middle of the screen. The Monitor window can be moved or resized and can be set for a single window or for a Program window to view video in motion and Source window to view selected frames.
Introduction to Cinematography

Review Lessons-Using Adobe Premiere to Edit Video

Using Adobe Premiere

Part 1: Getting Started, Bins, Importing Files
Opening a project and brought in a file to the project window.

Part 2: Video Organization - Bins and Project Windows Features
Successful filmmakers and video-makers are meticulous planners and organizers. Lucky for you, a Premiere beginner, you don't have to exert much physical force to get this job done - just click and you're able to clean, organize, label, and work better within the application.
Introduction to Cinematography

Tutorial 3

Introduction to Premiere, Adobe On-line Training
Review Tutorial and then Log on to Introduction to Premiere Free Online training at: http://www.adobe.com/education/training/main.html

Training for educators
Get a fast start learning and using Adobe software. Register below to view free online courses and learn about discounted training resources for educators. Check back often for new opportunities to master Adobe software.

Advanced Adobe On-line Training
Educators are eligible for discounted pricing on advanced Adobe online courses developed by product experts at Element K.
Introduction to Cinematography

Tutorial 4
Setting up Transitions in Premiere

Transitions are one way to add to the storytelling element of your video. Experiment with the different transitions from the transitions library in Premiere.
CREATING TRANSITIONS in PREMIERE

1. Drop the video clips onto the A and B Tracks

2. Select a transition from the Transition Floating Palette and drop (drag) the transition into the Transition Track

3. Overlap the Transition between the two video tracks to be sure that the transition is associated with both the video clip.

4. To view the transition in the Monitor Window, Hold down the Alt or Option Key and move the Work Area Bar across the Transition. This is called Scrubbing.

5. You can also build a preview of the section of the video timeline containing the transition.
   To Do This:
   1. Move the Work Area Bar so it covers the transition
   2. Press Enter or Return

Premiere On-line Training: Introductory training in Premiere is available on-line at the following URL:
www.adobe.com/education
Select Training
Select Free on-line Training and Premiere
Follow the instructions to enroll in Free On-line Training
You can use your name in the Educator Field

Move the Work Area Bar across the video area you wish to view.
Introduction to Cinematography

Tutorial 5

Making a Music Video in Premiere

Developed by Betsy Kopmar, Video Instructor, Academy of Art College, San Francisco, CA

Making a Music Video can be an exciting way to take your video footage to completion. These same techniques can also be used to sync music or sound to a series of clips, sports shots or any sequential footage.

In Premiere 6 you can arrange icons of your clips in a story sequence to create a storyboard and then use a wonderful new feature called "automate to timeline", which takes the entire contents of the storyboard and streams the material out along a timeline you have set up arbitrarily or matched to the beats of the music in your video.

You can use the automate feature to assemble a very quick rough cut, with all the clips sequenced across the timeline. You can then follow the quick rough cut with more careful trimming of the in/out points of individual clips. You can use a variant of the automate to timeline feature to create a quick music video by marking your audio in the timeline and then dropping the storyboard to automate to the audio based timeline, automatically trimming the clips to hit these audio markers.

In this project we will learn how to:
1. Bring audio into the timeline and trim to a reasonable length if necessary.
2. Create unnumbered layer markers at important moments in the audio.
   (This process is called Audio Spotting).
3. Create a new storyboard.
4. Arrange clips in the storyboard, including duplicating clips, adding colored solids.
5. Automate to the timeline, choosing from the menu options to "sequence clips at the unnumbered audio markers" (This shoots the contents of the storyboard down to the timeline, with the clips automatically trimmed to fill the space between the markers.)
6. Preview, and voila, instant music video.
7. Render using your preferred codec.
INTRODUCTION TO CINEMATOGRAPHY

Making a Music Video in Premiere

TO BRING AUDIO INTO THE TIMELINE

STEPS:
1. File>Import to bring audio to project window.
2. Drag audio icon from Project window to Audio 1 track in the timeline, and if necessary, trim to desired length using the razor tool.
3. TO TRIM:
   a. Choose razor tool
   b. Go to 1 min. mark on timeline
   c. Click on audio clip with the razor which slices it into 2 sections
   d. Choose the selection tool
   f. Click on the right-most audio clip and delete it.

Audio Timeline
The audio wave form will appear in the Audio timeline
AUDIO SPOTTING
One of the main reasons for doing audio spotting in general (outside of this particular project of automating storyboard to unnumbered markers) is to be able to close up the waveform display and still have available the necessary information about audio events, now translated up into a series of layer markers.

The waveform is an excellent representation of the peak and valleys of the audio amplitude, and it's often enough to eyeball the waveform and line up the video cuts with the audio peaks. But the waveform display is very RAM-intensive and slows down previews as it redraws.

TO VIEW WAVEFORM DISPLAY - Twirl down the arrow to the left of the audio layer.
5. AUDIO SPOTTING
Setting unnumbered layer markers at important moments in the audio; is called audio spotting. Audio spotting in Premiere is as simple as tapping out the beats as the music track plays. It does nothing to the audio, doesn't make spots on it or otherwise harm or interfere with the audio.

d. To move an audio marker, click on it and drag.

e. To delete an audio marker, control-click on the timeline, which brings up the context-sensitive menu, choose "delete selected marker".

The audio is now prepped and spotted and ready to receive its video.

NOTE: If you have imported audio from an external device, be sure to UNPLUG the device from the computer. If you do not do this, your final project will be recorded back to the external device and you will not be able to hear the preview.

6. LAYER MARKERS
Numbered and unnumbered Layer Markers, are used to create signposts about important areas in the edit. Audio Spotting is another use of all-purpose layer markers.

This use of layer markers is to tell us where the important events are in the audio; important beats, breaks in the rhythm, introduction of a new instrument or voice.

7. AUDIO SPOTTING TO CREATE UNNUMBERED LAYER MARKERS
a. To create layer markers specific to audio, play the audio, and while the audio is playing tap the asterisk on the numeric keypad in time to the beat. (The Asterisk is the Star Key.)

b. A gray, icon appears along the top of the timeline (not on the audio layer).

c. You don't see the markers as you are tapping, but when you stop the audio preview, the markers appear. If the marks are not exactly where you want them to be, you can move or delete them.
TO PREPARE THE VIDEO PORTION OF THE PROJECT:
The visuals to be used with the audio track must be assembled in the Storyboard. The Storyboard's gives you the ability to automatically align the clips with the audio markers in the timeline.

STEPS:
1. CREATING A STORYBOARD:
   TO Import video, stills, and movies to the Project window:
   a. File>New
   b. Choose New Storyboard from the drop-down menu. (The Storyboard opens in its own window and appears as a blank work area.)
   c. Drag individual clips to this open area of the storyboard, or drag the entire contents at one time. (The clips are displayed as graphical thumbnails)

2. MOVING CLIPS TO THE STORYBOARD:
   a. Click and drag on the clip to reposition it in the sequence of the storyboard. (You can duplicate clips as many times as you wish)
   TO duplicate the same clips:
   d. Select a clip, then copy (Comic) and paste (Com+V) (Duping the clip doesn't necessarily mean that you'll be repeating the exact frames at each marker.)
Making a Music Video in Premiere

3. **CREATING SOLID COLOR IMAGES AS FILL**
   TO generate additional solids colors for additional clips for the Storyboard
   a. File>New>Colored Matte (This will create colored solids)

   TO duplicate colored solids in the Storyboard
   b. Select the solid
   c. File>Copy>Paste
   (Scatter solids throughout the flow of your storyboard. They are good visual spacers, and provide a strong jolt of color and intensity which works well in these music videos)

The Monitor window will give you exact numerical feedback as to where you are in the clip. This is a much simpler, faster method than trying to set all the in/out points in the Storyboard. If the clips are video or a movie, you can edit the in/out points so that each instance of the clip in the timeline shows a different sequence from the master clip.)
4. **SYNCING THE TIMING OF VIDEO AND AUDIO:**
   You will want to try and sync the number of clips in the storyboard to the number of Audio markers in the timeline so the clips will automate to the Audio markers in time with the music. Don’t worry about getting the number of markers and clips exactly right - there's a bit of trial and error involved here and it is a very quick process to automate/delete, readjust the number of clips and try another Automate.
   
a. Make a very rough estimate of the number of markers you've created in the audio timeline.
b. Set up an equal number of clips and graphics in the storyboard.
   (The lower left corner of the storyboard displays a read-out showing the number of clips.)

5. **SETTING UP ADDITIONAL CLIPS**
   A music video with a very beat-intensive piece of music (e.g. 100 bpm) spotting the audio could translate into 50-100 unnumbered layer markers per minute. If you only have a limited number of clips (5-10 you will want to duplicate and manipulate the video to create a matching number of video segments.
   a. Copy/paste) to duplicate clips in the Storyboard
   b. Don't change trimming in/out points
   c. Automate to Timeline.
   d. When the clips are in the timeline, zoom in on the timeline (8 frames view) and use the Slip edit tool on each clip.
   (This is a fast process. Work right across the story line, giving each clip a little tweak.)
6. **TRIMMING ON THE STORYBOARD WITH PRECISION**  
   a. Double-click on a clip in the Storyboard (The clip opens in its own clip window, with all the regular controls of the Source view - time, duration, in/out point tools.)

   b. Copy/Paste a new copy of the clip

   c. Change the in and out points in the window  
      (This is different from how things work in the Source window, where you can easily create an infinite number of segments from a single instance of the clip, each with their own in/out points. What makes the Storyboard in-out clipping such a unique tool is that it allows you to Automate to the Timeline. You cannot do this from the Source window!)
Making a Music Video in Premiere

AUTOMATE STORYBOARD TO TIMELINE

STEPS:
1. From Project menu, choose Automate to timeline. A new menu will appear:

2. Select Storyboard, choose "Whole Bin". To Timeline

3. Select Placement, choose "At unnumbered markers"

4. Select Insufficient Material, choose "Leave gap" (If you do not choose this Premiere will try to stretch the length of clips and this might distort your video.)

5. Check "ON" for Ignore Audio (If you don’t Ignore Audio, the audio gets sliced to pieces at each marker, instead of being left alone and totally smooth and continuous.)

6. Click "OK" (The entire contents of the storyboard are then sent to the timeline, with their in points matched to each audio marker, each clip trimmed to last only for the duration of time until the next marker. The clips are divided so they alternate between the Video 1A and Video 1B tracks so you can easily insert transitions if you wish.)

7. Preview by hitting the space bar and enjoy your high-energy edit job!!!
Introduction to Cinematography

Still Image from Award Winning Student Video

By Michael Nedelman
Coral Reef High School, Miami, FL
See Video Clips included in this workbook