

MTN
Basic Digital
Edit
Class
Handout
(iMovie 6)

Some Edit Basics

The fun really starts once you have shot all your video. That is when you edit it into a program. How you edit that video will have a great impact on how effective your program will be, and whether it will elicit yawns and sleep from your viewers or whether your viewers will get engaged and empowered by the information you present.

The tape you shoot with your camera is called a "**Source**" tape. Source material can come from a camera, from a session recording in the studio, and from many other sources (such as archive video). A finished program will be recorded on a tape called a "**Master**" tape. If you are doing **Nonlinear editing**, a computer lies in between those two types of tapes.

The first step in the editing process is called "**logging**." No, you do not have to put on your lumberjack outfit and sharpen your saw. When you log video, you watch through your tape and take notes. You figure out which shots are worth using and which shots are not. Write down the time code numbers from your tape to help you keep track of where your scenes are on the tape.

In Nonlinear (computer-based) editing, you transfer the video clips that you want to use onto a computer, use the computer's software to rearrange your shots so that they are in the order and duration that you want, and add extras like music and effects. Then, when your video is finished, you record it onto your Master tape.

Before we go to the edit system itself, let's spend just a little time on some of the terminology.

To get video and audio in a computer, you need a "**codec**." Codec is a small word made out of the collision of two long words: *Com*press and *Dec*ompress. A codec converts analog video and audio information into digits, 1's and 0's. these are the basic building blocks that computers use to deal with information.

Although there are many codecs out there, the codec that we will be using is called the DV Codec. This codec provides the signal for both the DV and DVCAM video formats.

There is a special cable that is used to transfer the DV codec signal from one piece of equipment to another. Apple invented it and named it "firewire." Sony used it and came up with their own name for it: "i.Link." the engineers called it "IEEE1394." Microsoft usually calls it just "1394." All these terms mean exactly the same thing: a computer video signal carried through a special cable.



iMovie Editing System Step by Step Introduction

iMovie Pre-flight checklist

1. Start up the computer by pressing the well-concealed power button.
2. Select **Access** from the log in screen.
3. Type in the password.
4. When the computer finishes booting up, click the iMovie HD icon (1) in the dock to start up iMovie.



5. You then get the iMovie start up screen with three options. If you are starting a new project, click on "Create a New Project." If you are returning to a project you have already begun, select that option. You may also open a project you have already started by clicking the icon with your name on the desktop.
6. If you are starting a new project, create a Project with the Name "**Your Name's Project.**" Be sure to include your name in the name of your project or else your project will be considered an orphan and will be deleted. Save your project on the desktop. Make sure the Video format is set on "**DV.**"
7. Click Create.
8. You are now in your project and ready to begin. Happy Editing!

Welcome to non-linear video editing with iMovie!

You have shot some video. Congratulations! Your video may be good, but it is probably not perfect. With editing, you will make it perfect, or close to perfect.

First of all, that video shot with the camera is called your **Source** video. The first thing you might do with that video is look at it. You can even watch it directly on the camera. The process of looking at your video prior to editing is called **Logging**. If you are extra ambitious, you might even take some notes about your tape, writing down the Time Code numbers. The Time Code Numbers are the time numbers you see in the viewfinder.

Now we are ready for editing. What we are going to do is record the best of our source video into the computer and then use iMovie software to edit it together into a program. Editing means that we will cut our scenes down and rearrange them into the order that best tells the story we want to communicate. When we have our video edited the way we want it, we will then record it from the computer back onto a tape. This tape is then called our **Master Tape**.

The edit system is composed of a Mac computer with iMovie installed on it. You will also need a video deck or camera. There are decks installed in the Mars and Neptune systems, but if you are using one of the systems in Cyberspace, you'll need to ask for a deck at the checkout desk. The deck allows you to get video into and out of the computer. You might also hook a camera up to the computer if you use your own camera to record your video.



Getting video into iMovie

1. If you are using one of the Cyberspace systems, the first step is to hook up the deck to the computer using the firewire cable. If you are using Mars or Neptune, go to steps 2. The computer's firewire jack is on the right side of the computer. Please plug this in before you start up the computer.
2. Turn on the deck and put in your tape. Start up the computer and iMovie according to the directions in the **Pre-Flight Checklist**.
3. Make sure the Camera/scissors icon in iMovie is switched to the **camera** position (a). When the switch is in the Camera position, you can import video into iMovie. When it is in the scissors position, you can edit that video.
4. Use the mouse to click the Play, Pause, Fast Forward and Rewind buttons (b) to search through your tape. When you find some video that you would like to capture onto the hard

drive, click the **Import** button (c). Pressing on the space bar works for this as well. This will play your tape and start recording video from your tape onto the hard drive.

5. Feel free to stop your tape with the stop button when you get to video that you will not be using. When you stop your tape, iMovie automatically stops recording your video onto the hard drive. Once you find video that you would once again like to capture, click the Import button.

6. As you capture video onto the hard drive, you will notice pictures appearing in the clip Viewer window on the right (d). These pictures represent the scenes you recorded. iMovie uses information stored on the tape to divide your video into separate clips based on your use of the camera's Record/Pause button. Each time you stop the camera, you have created a scene. iMovie uses its **Scene Detection** function to break up your video based on these scenes. Each shot that you got with the camera enters iMovie as a separate scene. This is a good thing to remember while you are shooting. Instead of letting the camera run for a long time, start and stop the camera as you go from one image to another.

It is a good idea to Save often! Use File>Save Project or Apple + S.

Editing Clips

Once you have captured the video from the tape, slide the Camera/Edit switch into the Scissors (edit) position (1) (Clicking on a captured clip in the Clip Viewer (2) will also change the mode).

The big window in which you see your video play is called the "**Monitor**" (3). To the right you will see the "**Viewer**" (2).

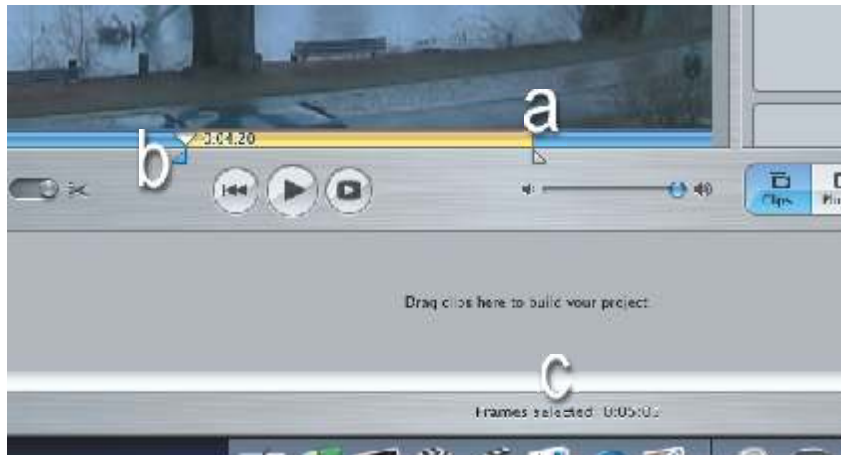
By clicking on the buttons under the viewer you can look at your captured clips, audio clips, title options, still pictures and much more (4).



At the bottom of the iMovie window is the **storyboard/timeline (5)**, on which you order the clips to make your video. The triangle in the blue bar below the Monitor is called the "**Playhead**" (6) and represents the frame you now are playing, seeing and hearing. The playhead is in a strip called the "**scrub bar**" (7).

You can click Play (8) to play a clip or your movie in the Monitor, or you

can click and drag on the playhead in the scrub bar (7) to "scrub" thru your clip quickly or slowly.



Click on a clip in the clip Viewer to open it in the Monitor (if you double click it, you bring up the "re-name" box, which gives you a chance to give it a new name).

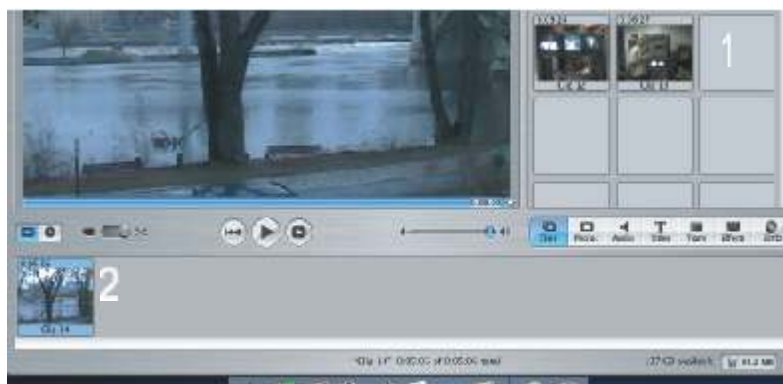
Select the portion of the clip you want to use. An **In Point** is where a scene begins and an **Out Point** is where a scene ends. Right now, the In Point is

the place where you started capturing a scene, and the Out Point is the place where you stopped capturing it. You can change these points to get your clip the perfect length.

The **In and Out Point triangles** will appear when you put the mouse pointer close to the left edge of the scrub bar of the Monitor window (6). Drag the small triangle on the left, the Out Point triangle (a), to mark the end of the clip. Then drag the In Point triangle (b) to mark the beginning of the clip. Choose **Edit>Crop** to trim the clip according to the points you identified.



Another way to set In and Out Points on a clip is to play the clip and when you find the point where you want it to begin, hold down the shift key and click on the playhead at that position. Play the clip to the out point that you want and hold down the shift key again before you click at that point to make an Out Point. Then Crop the clip.



If you ever want to get back the original duration of the clip, select that clip and select **Advanced>Revert Clip to Original**.

After you set your In and Out points, the selected duration of the clip can be seen on the bottom of the iMovie screen (c).

Drag your clip from the clip viewer (1) down to the storyboard (2). The clip disappears from the Clip Viewer. If you wish to leave a copy of the clip in the Clip Viewer so you can use it again, hold down the "Alt" key as you drag the clip onto the storyboard.



If you wish to split a clip into two or more segments, place the Playhead at the point where you would like to split it and then select "**Edit> Split Video Clip at Playhead**" (a). The two



halves of your clip will appear in the Clip Viewer (b).

To play your whole movie, click in an empty part of the storyboard (c) to make sure no single clip is selected, and then press the play button (d). If you select a clip in the storyboard and press play, you will play only that clip.

To play from the beginning of your storyboard, click the "**Go to the Beginning**" button (e).

You can scrub across your movie by clicking and dragging on the Playhead in scrub bar (f) of the

Monitor window.

If you want to put a clip in between two other clips on the storyboard, just drag it between them (g). This is called an "**Insert**" edit.



Once you have your shots down on the storyboard, you can still adjust their duration. One way to think about editing is to play your project through once you have some clips on the storyboard and get a feel for the rhythm and flow of your clips. If one shot is too long, click it to open it in the Monitor. Adjust the In and Out points and choose "**Edit>Crop**" to make the

change. If a shot is too short, click on it to open it in the Monitor. Then select "**Advanced>Revert Clip to Original.**" Then set your new In and Out points and select "**Edit>Crop.**"

Effects



Transitions

To place a transition between clips on the storyboard, click on the **Editing tab** (1) of the Viewer window, and then on **Transitions** in the top of the window. You are now in the Transition Viewer.

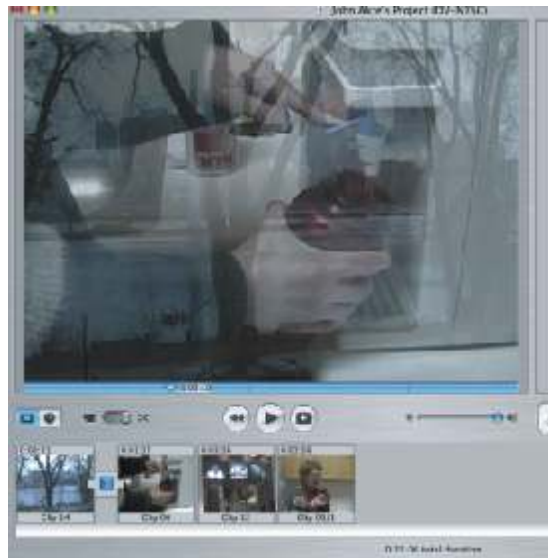
You will see a list of possible transitions (2). Adjust the time (4) and other options (such as direction - 5) in the Transition Viewer and press the play button (6) to see the result. Drag the transition you prefer between two clips (3).

Note that a red line runs through the transition icon on the storyboard. This shows that the computer is rendering, or creating, the video for this effect. You must wait until the red bar disappears before you can play the effect.

If you decide to make a change to a transition already in the storyboard, click on the transition icon in the storyboard (3) and then make changes back in the Transition Viewer window (5). Click on Update (7) to apply the changes.

Transitions are a good way to move from one similar shot to another, or to demonstrate a gap in time, but if you use too many transitions your video might look too gimmicky. You are also sure to direct your audience's attention away from your message or story.

If you use a transition, try to come up with a reason to motivate it. For example, in the transition on the right, the dissolve helps connect the water in the river with the water from the tap.



Titles

To place a title, click on the **Edit** tab in the Viewer and then on **Titles** at the top (a). Choose a title effect (b).

Type your text in the text box or lines (c). To add more text lines, hit the plus sign to the left of the box. To reduce the number of text lines, click in a text box and then click the minus sign.

The speed adjustment lets you set the speed of your title effect (d). **Pause** (e) allows you to control the length of time that your title stays on the screen. Some title effects have more options. Notice that you can also change the direction of your title with the direction wheel



(f).

Drag the title effect to the storyboard clip on which you want to place the title (g). If you wish the title to appear against a black background rather than over a video clip, click to make a check in the **Over Black** box (h).



iMovie will then **render** the video. This means that it has to make a video clip of your title and write it on the hard drive.

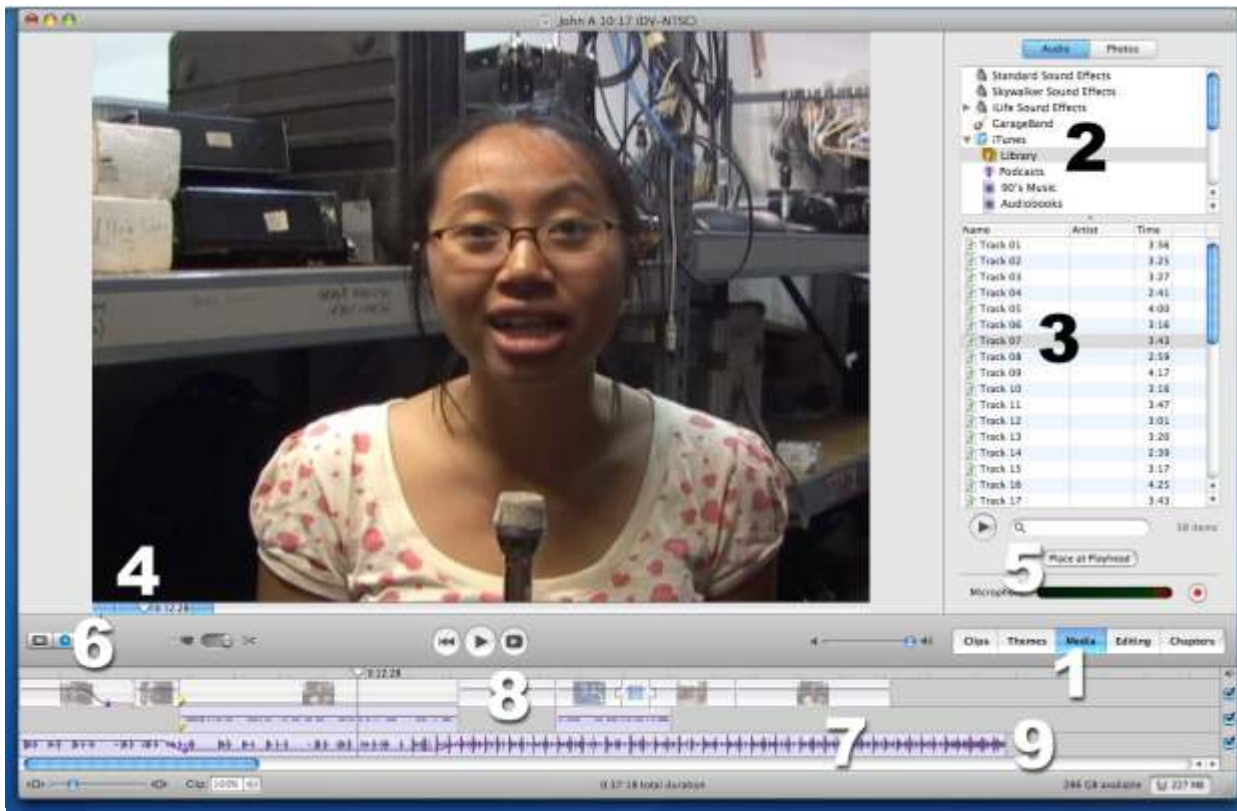
You will not be able to play back the title over your video until the red line has moved across the title clip and rendered the video. Then, to check the results, play back the scene or scenes on the storyboard affected by the title.

If you wish to change a title you have already placed, click on the clip with the title and then make any changes in the Viewer window. Then click on **Update** (i) to make the changes permanent.



Freeze Frame

To create a freeze frame, place the playhead on the frame you would like to freeze in the Monitor window (1). Then Choose "Edit>Create Still Frame" (2). A freeze of that frame will appear in the Clip viewer (3). Trim the clip as necessary and drag it down to the storyboard.



Audio

To add music or sound effects, click on the **Media tab** of the viewer (1) and then on the **Audio button** on the top of the window. Find the music track you want in the iTunes library (2). Select the track you wish to use by clicking on it (3). Note: Audio clips must be imported into the iTunes library before they can be used in iMovie.

Position the playhead (4) on the storyboard where you would like the music to begin and click the "**Place at Playhead**" (5) button. Your audio track has been added to your video.

iMovie will automatically switch to the Timeline view, which provides for more precise audio editing. To go back and forth between Timeline and Storyboard view, click the **Clock button** (6) for Timeline and the Picture Frame button next to it for Storyboard..

You will notice strips that represent your video and audio clips in the timeline view (7). These strips are called "**tracks**."

The top track (8) represents both the video and the audio from the clips that you captured from tape and edited. There are also two additional audio tracks below this for additional audio, such as music.

Once you have placed the music on the timeline, you will see it represented on one of the audio tracks. To adjust the length of your music clip, drag on the beginning or the end of it to shorten it (see the end of one audio clip at 9).

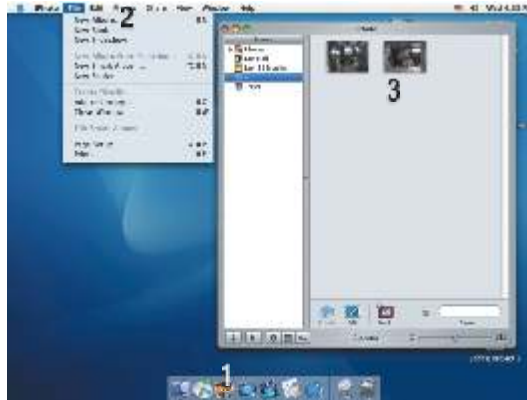
To adjust the volume of an audio track, select "**View>Show Clip Volume Levels**" (a). Now you will notice a purple line on the middle of all the tracks (b). If you click on it, you will place a **keyframe** there (c). A keyframe allows you to make a change in the clip's audio level. Drag the keyframes up or down to change the level of your audio.

If you wish to extend the length of a clip, you must first turn off the "**Show Clip Volume Levels**." Option. Select it from the drop down menu and click on it to take away the check mark (a). For more information on this, see page 13.



If you wish to separate the audio from a video track so you can use that audio elsewhere, click on that clip and select "**Advanced>Extract Audio**." Now the audio clip will appear separate from the video clip. You may now drag the audio clip to a new location, or copy and paste it in an additional location.

To hear the audio as you scrub the playhead across the scrub bar in the timeline window, hold down the **Option** key as you click and drag the playhead across the scrub bar.



Photographs

You can import photographs into iMovie through a digital camera, from CD, from a thumb drive, or you can scan a photo at the scanner station.

To find out how to use the scanner station, please read the scanner station addendum in this handout.

Put your CD or drive with the photo files on it into the eMac.

Open up the iPhoto program by clicking on the iPhoto icon in the dock (1).

You may have to resize the iPhoto window so you can see both it and the CD or drive.

Select **File>New Album** to create a new album in which to place your photos (2).

Double click on the CD or drive icon to see the icons for your photos.

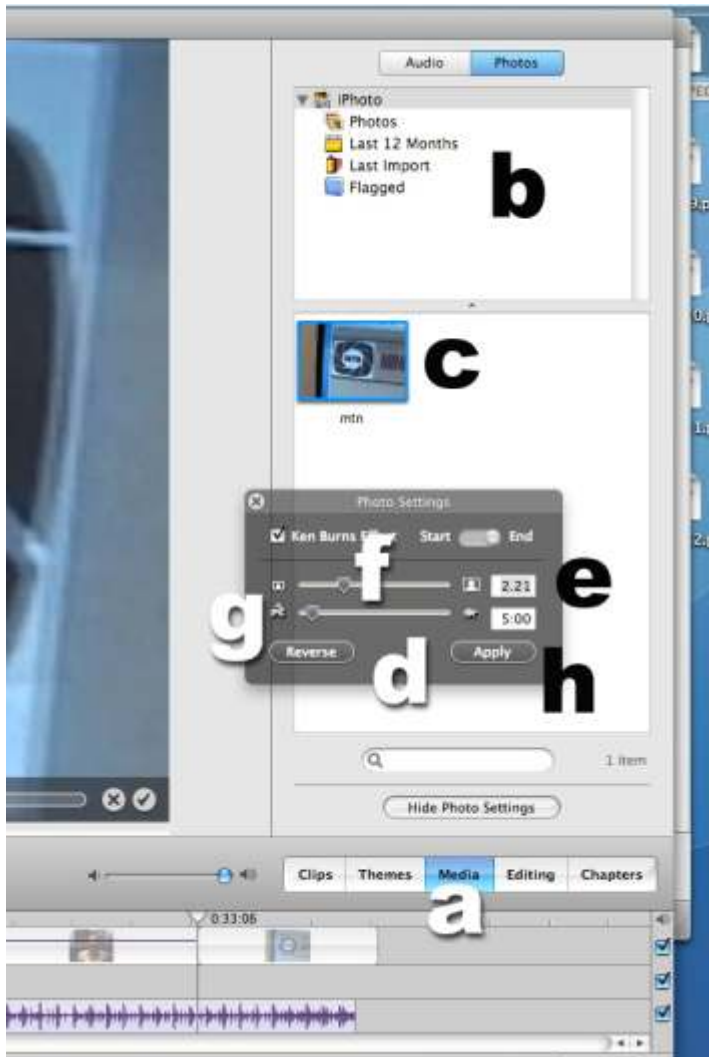
Select the photos you wish to use by drawing a box around their icons. Drag the icons into the open Album window of iPhoto (3).

Close iPhoto and Open iMovie. Open up your project or start a new project.

Click on the **Media** icon (a) in the Viewer and then on the **Photo** button on the top of the window to open up the Photo Viewer.

Find the album or library in which you placed your photo (b). Your photo will now appear in the Viewer window (c).

Click on a photo to select it. When you do this, the Ken Burns Effect palette opens (d). Put a check mark in the box to add the effect to your photo.



Drag the switch to set a start size and position. For example, if you wish to do a zoom in, you will want to set the start size to 100%. Either type in 1.00 in the size box (e) or drag the size slider (f) all the way to the left.

Switch the Start/End switch to End and set your End size. Using the same size slider (f) or box (e), enter the size you wish to end the effect at. For example, type in 1.25 in the size box or drag the slider to the right until the box reads 1.25 to increase the size of the photo by 25%. Note: increasing the size of your photo too much will lead to grainy pictures.

Adjust the length of the photograph by adjusting the Rabbit/Tortoise slider (g).

Click Preview to see what the effect will look like. Click Apply (h) to put the photo with the effect on your storyboard. The photo with its effect appears at the end of the

storyboard. You will have to drag it into place in your movie.

If you wish to change the effect, click on the Photo icon in the storyboard and make any adjustments. Then click on Update. Wait for the red bar to render the effect before you try to play it.

More on the Timeline View

You can also trim video clips in the Timeline view window.



First, select the clip you wish to trim (1). Click on either the front (2) or back (3) edge of the clip and drag it in the direction that you want to go.

If you shorten a clip, the rest of the timeline clips move forward to fill the gap. If you lengthen the clip, the rest of the timeline adjusts, moving all the following clips forward, and making your video longer.

If you wish to cover part of the end of an interview clip with a cutaway, first extract the audio from your interview clip by clicking on it and selecting "**Advanced>Extract Audio.**" The audio for that clip now appears on the middle track (4).

Make sure the shot you wish to use as a cutaway (i.e. a reaction shot of an audience) follows your interview clip directly (5). Drag on the out point line (6) of your interview clip to shorten the video portion. The cutaway clip or clips will move in to occupy the video space that follows that clip. The audio of the interview clip will continue, but the video will change to that of your cutaway clip.



This will come in handy if you are doing an interview and have a jumpcut caused when you had to cut out something that somebody said. Use the cutaway to cover up the jump and your video will look more fluid.

Some of your audio clips will be linked to clips in the video track, and some will not be. An audio clip that is linked will have a small yellow circle on it, and so will its linked video track (a). To link up an unlinked audio track, select that audio clip and place the playhead over the video clip to which you would like it to link. Then select **Advanced>Link Audio Clip at Playhead.**

If you want to zoom into your timeline to see a clip or its Out Point better, drag the timeline zoom slider (7) to the right. To zoom out and see the big picture, drag the slider to the left.

Another way to adjust the audio level of a clip is to click on that clip and change the sound level in the **Clip Level Adjuster** (8). Either type in a percentage (100% equals the level recorded on your source tape) or click on the speaker icon and drag the level slider up or down.

Putting your video back on tape

Before you go to tape, you should shut down the Mac and connect the firewire cable of the deck to your computer.

To put your edited video on tape, select "Share>Video Camera."



Click on the **"Video Camera"** icon (a) to put your video back on tape. Add some black to the beginning (b) and end (c) of your project by filling in the fields, and click **"Share"** (d) to record to tape.



Make sure your tape is in the deck and that the write protect tab is switched into the Record position.

When you put your video back onto tape, watch the audio level on the VU meter of the record deck. You want to make sure that the audio levels are bouncing, but not going much over -12. If you record your video and see that your levels are very high or very low, you may want to go back to your timeline and adjust the levels. Audio levels that are too high could distort. Audio levels that are low are difficult to hear.

Note the total running time of your project. It is given just under the storyboard in the iMovie window.

If you are submitting your show to MTN on tape, add color bars and countdown to the beginning of your project. You will find a folder on the desktop with Quick Time files that have one minutes of color bars and tone and a ten second countdown. Click and drag one of these files to the beginning of your storyboard.



To exit iMovie, Select the "File>Close Window" and then select "Quit" from the start-up box.

Cleaning up a project



As you edit, you may delete clips or effects. These items wind up in the project trash bin. For example, if you click on a clip and press the delete key on the keyboard, you put a clip into the project trash.

iMovie keeps you constantly updated on how much of the trash you are using at all times (1).

If you need more hard drive space to edit your project, select **File>Show Trash**. You can also click on the trash bin in the trash update field (1). You will now see the contents of the trash bin (2). You can either select some clips and delete them individually (3), or select "Empty

Trash" and delete them all (4).

Watch your Hard Drive Weight

Please do not load more than an hour of video on the computer. This will leave space for everybody else editing their videos.

When you have finished your show, delete your project from the hard drive, or use the project trash to delete scenes that you do not need any more. Keep a tidy hard drive. It will help out everybody.

To delete your project, click on your project icon on the desktop and press the delete key on the keyboard.

A staff person will also go through the computer and delete projects that have been left on the computer for more than a week without action. You cannot expect to save video on the MTN computers for more than a couple weeks.

If you are doing a longer project, or if you wish to have your video available for a longer time, you may wish to purchase a firewire hard drive.

You would then save your project on this external hard drive. You can plug your hard drive in when you are ready to edit and take it with you when you leave.

Talk to your instructor if you want to find out more about this. Your instructor, or an MTN staff person, will be able to recommend drives that will work well with our systems.