



UNIVERSITY OF UTAH
STUDENT COMPUTING LABS

Digital Video

Act II – Introduction to Editing and Distribution

University of Utah
Student Computing Labs
Macintosh Support
mac@scl.utah.edu

More classes

- **This class is a series**
 - **Act I – last week**
 - **Introduction and camcorders**
 - **Act II – today**
 - **Introduction to Editing and Distribution**
 - **Act III – next week**
 - **Tuesday, April 22nd, 1–3 PM, MMC 1745**
 - **Editing and Distribution tips**



Class overview

- **Importing video**
- **Editing video**
- **Exporting video**

What is video editing?

- **Linear**
 - Physical tape cut and pasted/taped together
- **Non-linear**
 - Video saved on a hard disk
 - Frames can be moved anywhere easily

What is video editing?

- **Process**
 - **Put video on hard disk**
 - **Edit video**
 - **Publish**

Editing Software

- Used to import, edit, and export video
- Many different applications
- In 1999, Apple released iMovie
- 4 years later...

Editing Software

- **Cost**
 - **iMovie FREE**
 - **Windows Movie Maker FREE**
 - **Adobe Premiere \$549**
 - **Final Cut Express \$299**
 - **Final Cut Pro \$999**
 - **Avid \$12,000 – \$53,000**

Editing Software

- **iMovie**
 - **Credited with reviving interest in video!**
 - **Credited with reviving interest in COMPUTERS...**
 - **Children use it**
 - **Used by professional studios**
- **Windows Movie Maker 2**
 - **Reviewers like iMovie better**
- **Everything else**
 - **Requires extensive (and costly) training**



iMovie

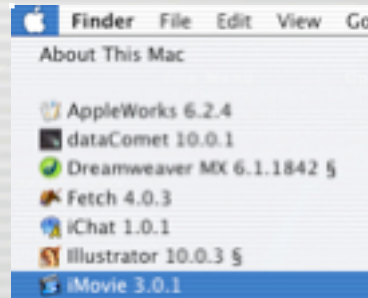
- Lets get started!

- Open iMovie

- Dock

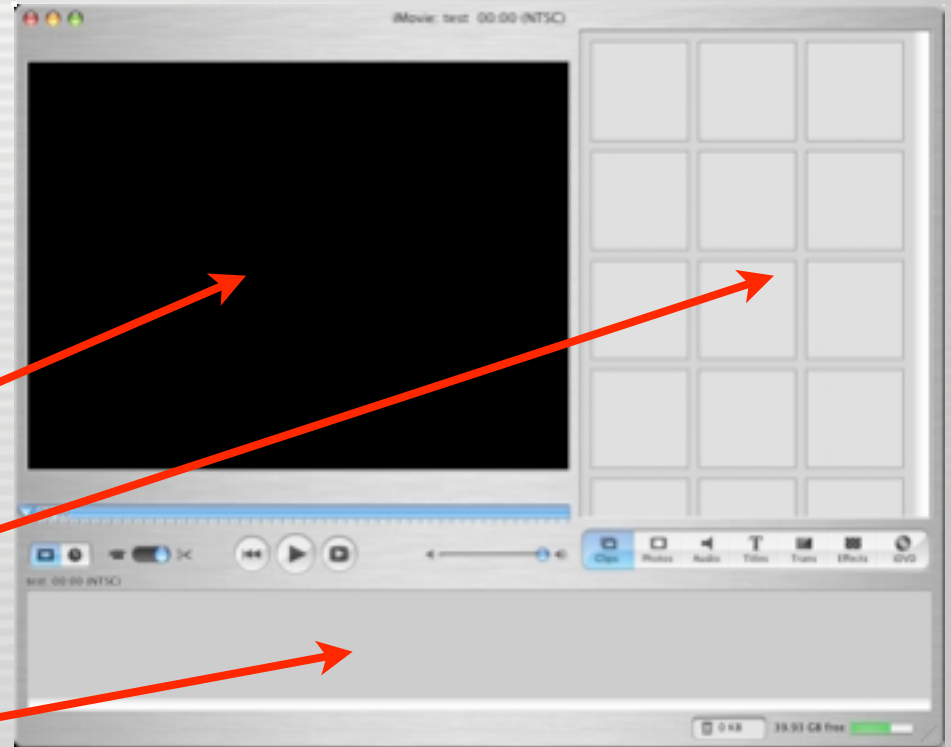
- Apple Menu

- /Applications/General/Video/iMovie



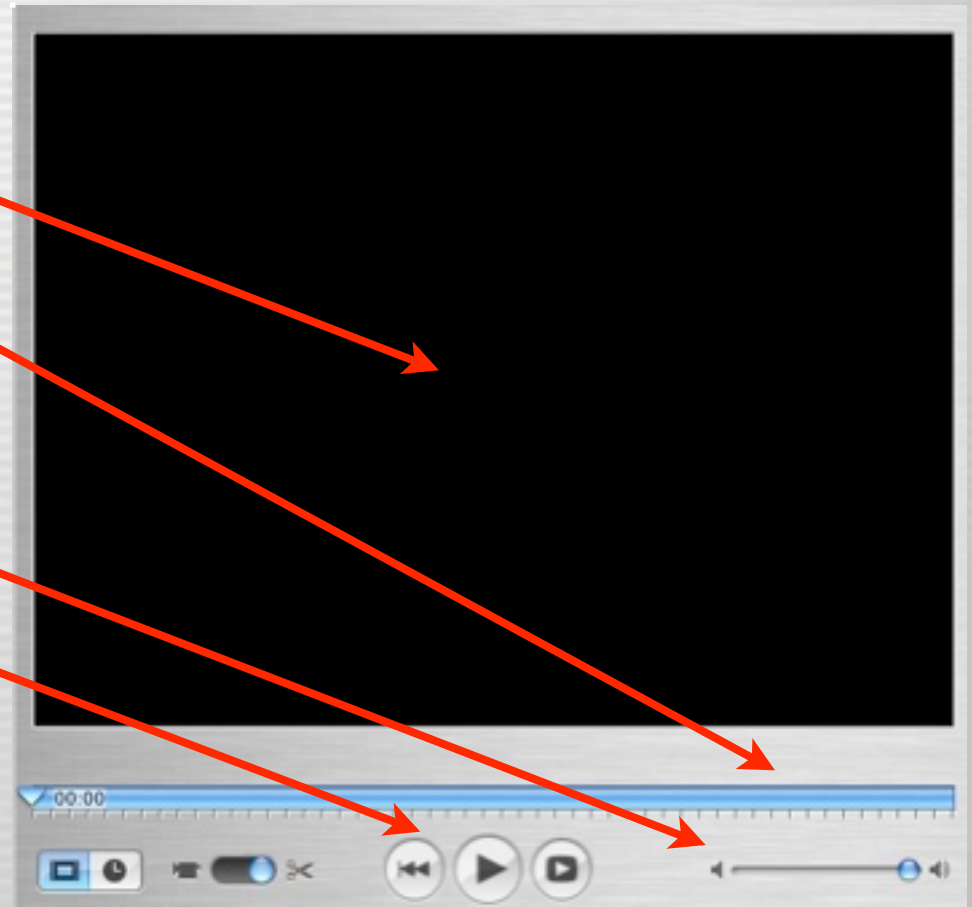
Interface

- Only one window
- No longer full screen
- 3 areas
 - Monitor
 - Panes
 - Viewers



Interface – Monitor

- **Monitor**
- **Scrubber bar**
- **Volume**
- **Playback Controls**
- **Mode buttons**

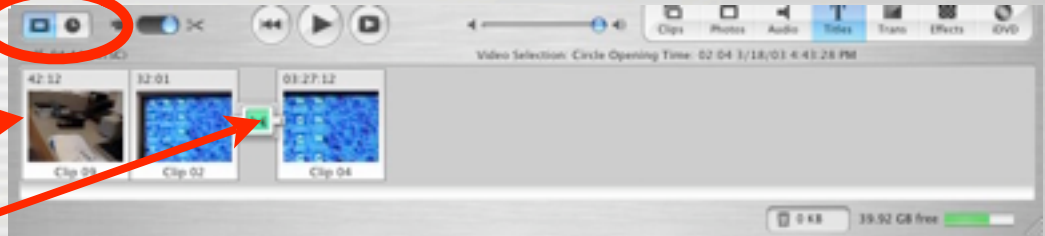


Interface - Viewers

- **Toggle button**

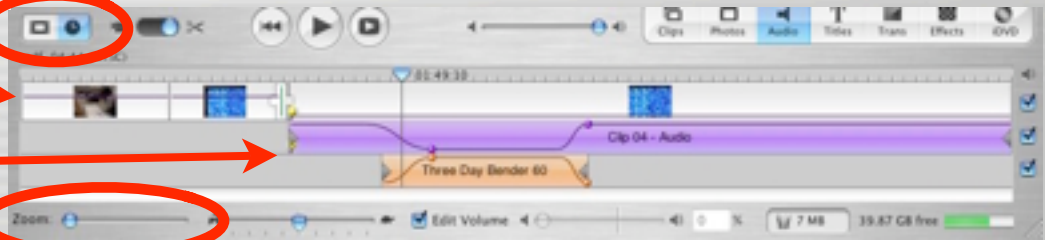
- **Clip viewer**

- **Clip**
- **Transition**



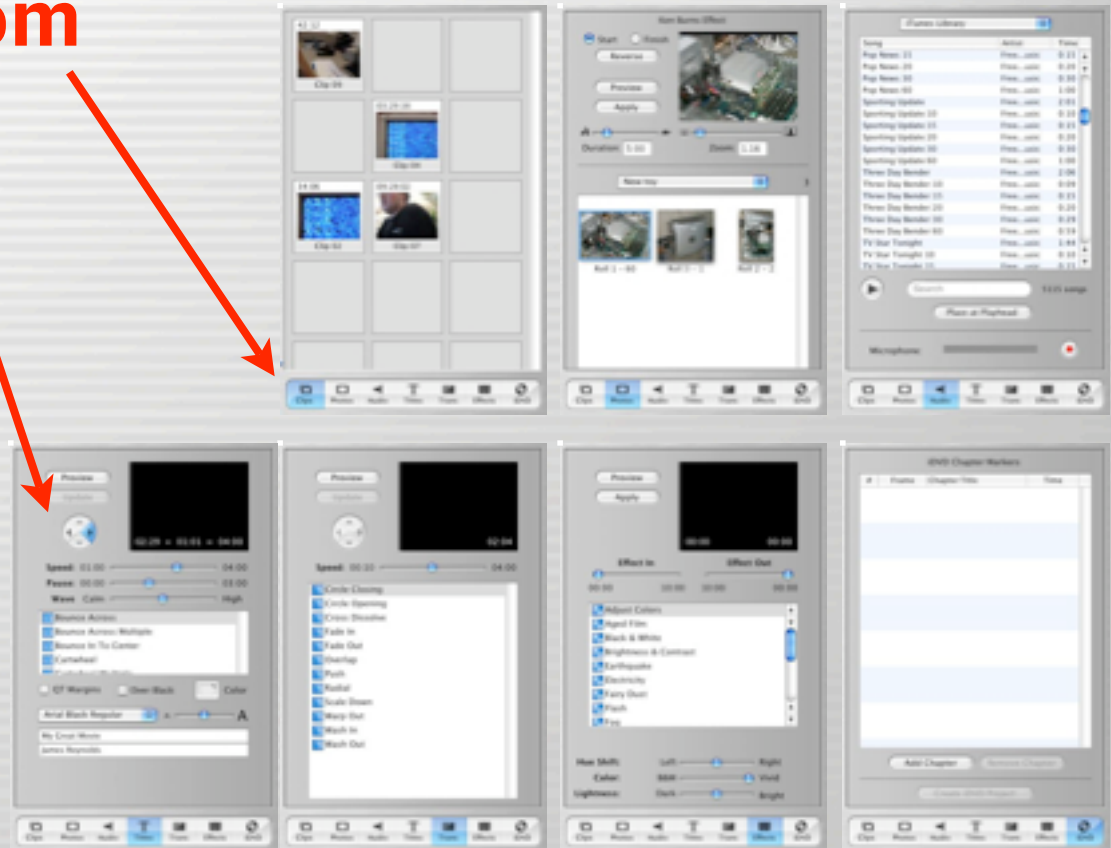
- **Timeline viewer**

- **Video**
- **Audio**
- **Zoom**



Interface – Panes

- **Switch at bottom**
- **Options at top**
- **Panes**
 - Clips
 - Photos
 - Audio
 - Titles
 - Transitions
 - Effects
 - iDVD



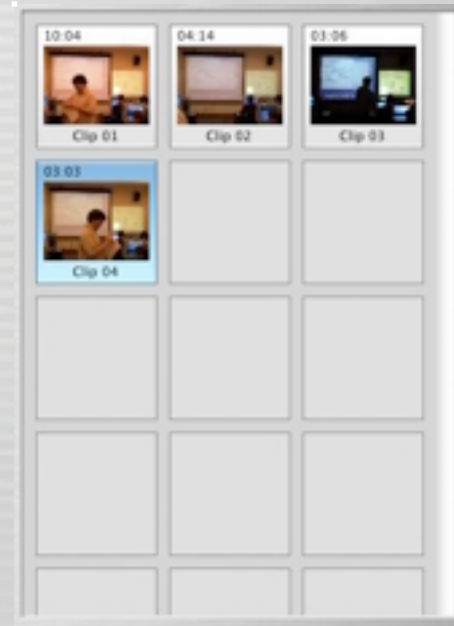
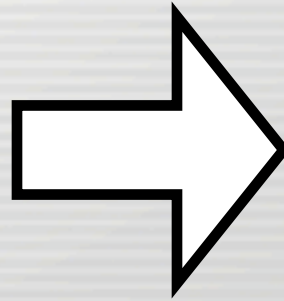
Import video

- **Plug in Firewire**
 - 4 pin: camera, 6 pin: computer
- **Get camera ready**
 - Put camera into VTR mode
 - Rewind tape 5 seconds before desired spot
- **iMovie**
 - Put in Camera mode
 - Click play button
 - Click import button
 - Click stop button



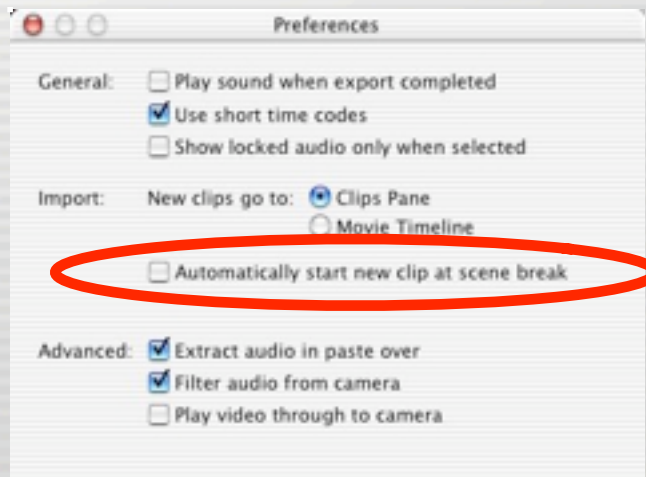
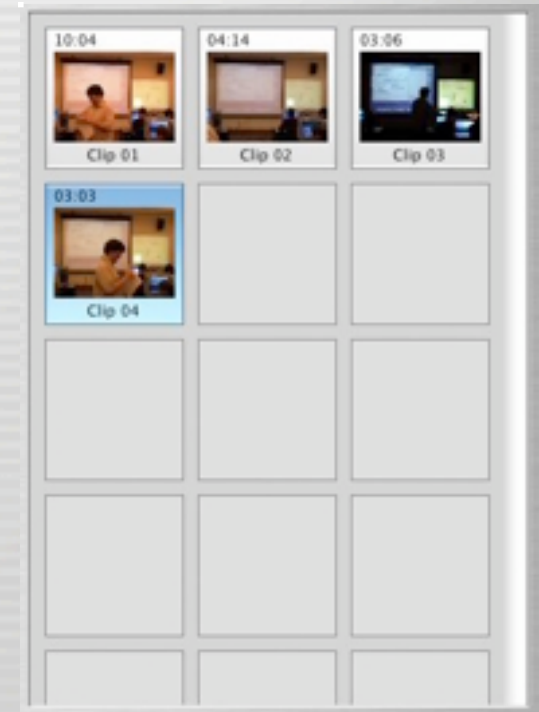
Import video

- iMovie will place clips into the Clip Viewer Pane



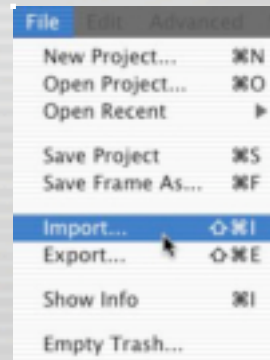
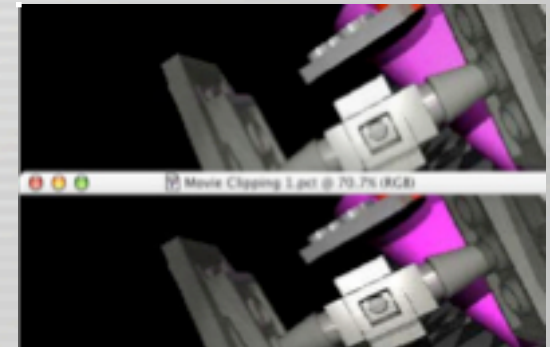
Import video

- Automatic scene detection
 - Splits clips
 - Where recording paused/stopped
 - Can be turned off in Preferences



Import video

- If you have video files
 - .mov, .dv, .mpg format
 - Resolution will be stretched to fit
 - Correct resolution is 720x480
 - Modify with QuickTime Pro
 - Export using custom size
 - File → Import



Selecting clips

- **View one clip**
 - Click on clip
- **View multiple**
 - Shift- or command-click on clips
- **View all clips in movie**
 - Click on background or Edit → Select None

Viewing clip(s)

- Press play button



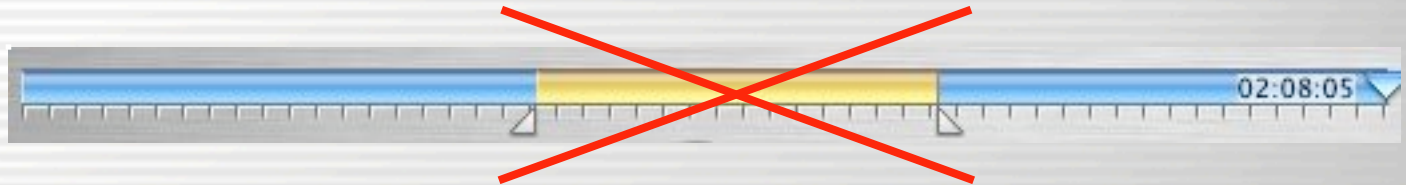
- Drag scrubber



- Use arrow keys

Cleanup video

- **Trim**



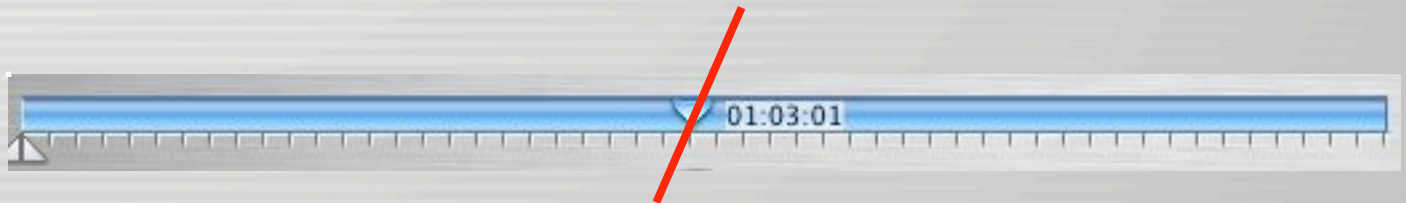
- Deletes selected frames

- **Crop**



- Deletes unselected frames

- **Split**



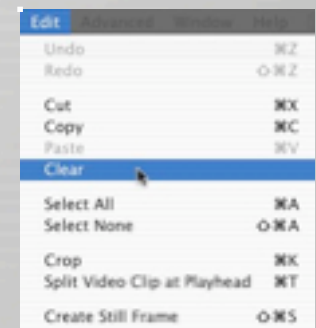
- Turns one clip into two

Cleanup video – Trim

- Select a clip
- Click and drag the crop markers
 - Select what you don't want



- Press Delete key or select Edit → Clear

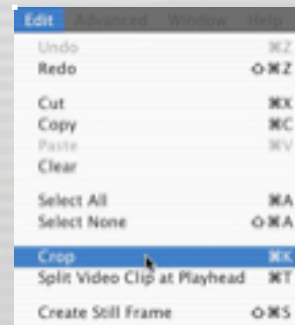


Cleanup video – Crop

- Select a clip
- Click and drag the crop markers
 - Select what you want to keep

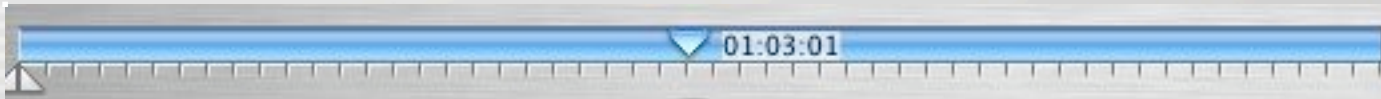


- Select Edit → Crop

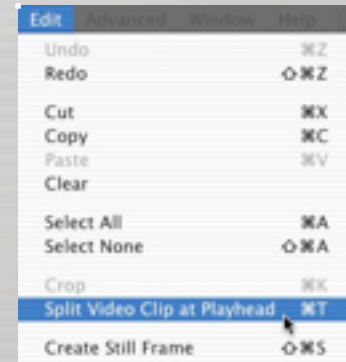


Cleanup video – Split

- Select a clip
- Drag playhead to desired cut location
 - Use arrow keys if necessary

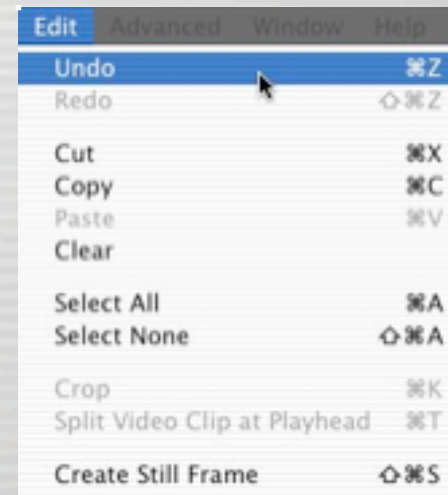


- Select Edit → Split Clip at Playhead



Cleanup video – Undo an edit

- If you make a mistake, select Edit → Undo
- You have 10 Undos
 - Unless you empty trash



Photos – Add

- Use iPhoto to import picture files
- Open Photos pane
- Choose an album
- Select a photo
- Drag image to viewer



Photos – Ken Burns Effect

- Click “Start”
 - Choose zoom value
 - Drag image to desired start location
- Click “Finish”
 - Choose zoom value
 - Drag image to desired end location
- Set duration



Transitions

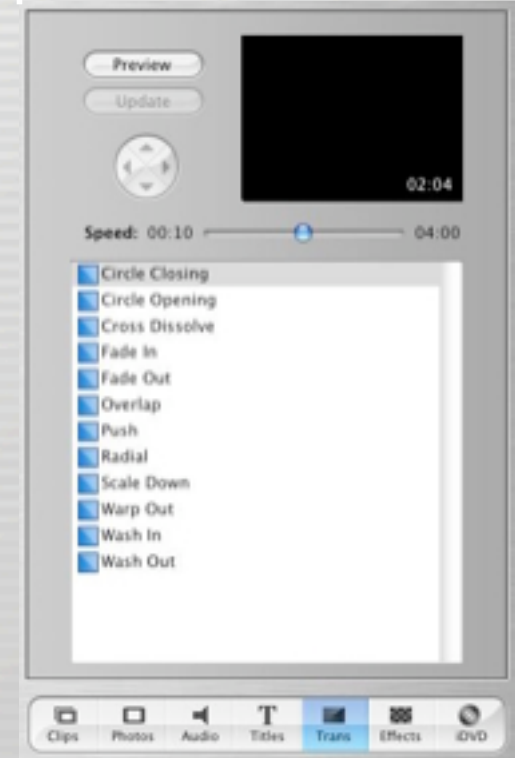
- Always add fade in and fade out
- Most clips should have no transition
- Cross dissolve is the most common transition
- Some transitions cause clips to overlap
 - Clips have to be longer than transition
 - Movie length will decrease
 - Add transitions before editing audio!

Transition
here



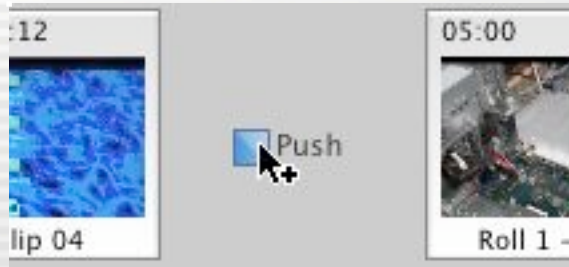
Transitions – Add

- Open Transitions pane
- Move playhead or select clip
- Click on transition name
 - You will see a preview
- Change duration
 - Listed as seconds:frames
- Change direction if available
- Click Preview

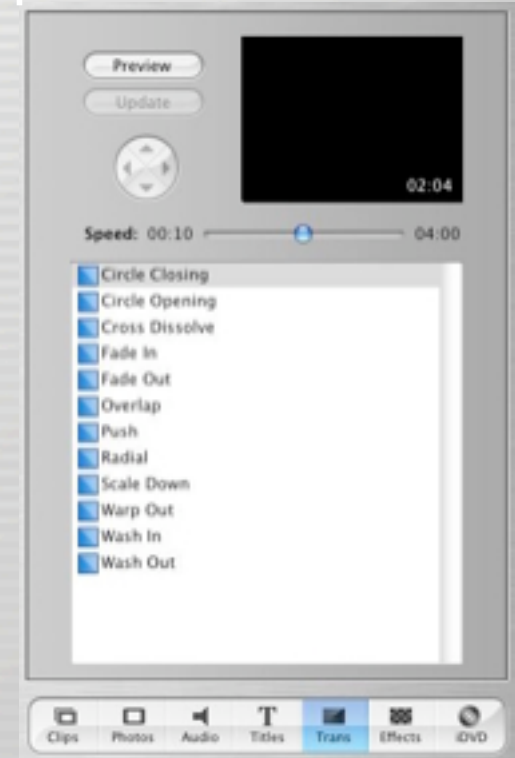


Transitions – Add

- Click on transition icon and drag it between desired clips

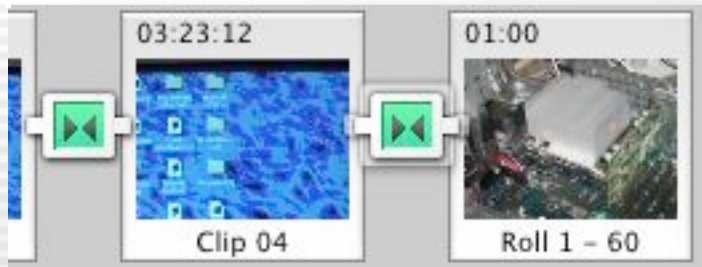


- Work while it renders

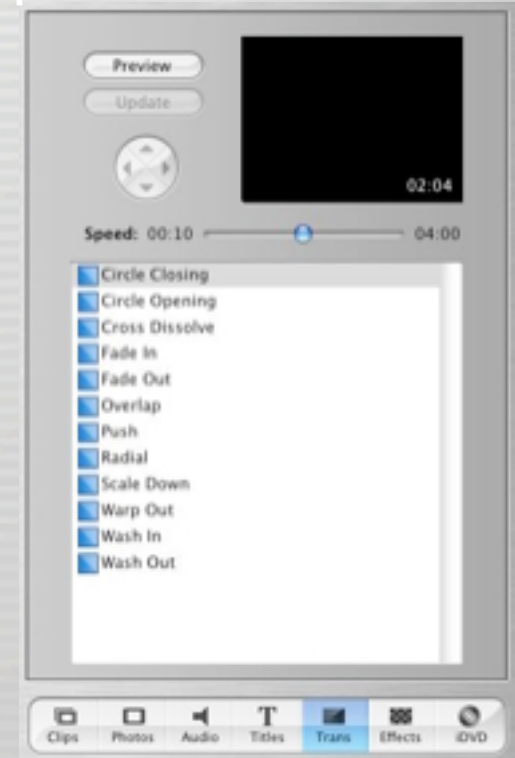


Transitions – Edit

- Select transition

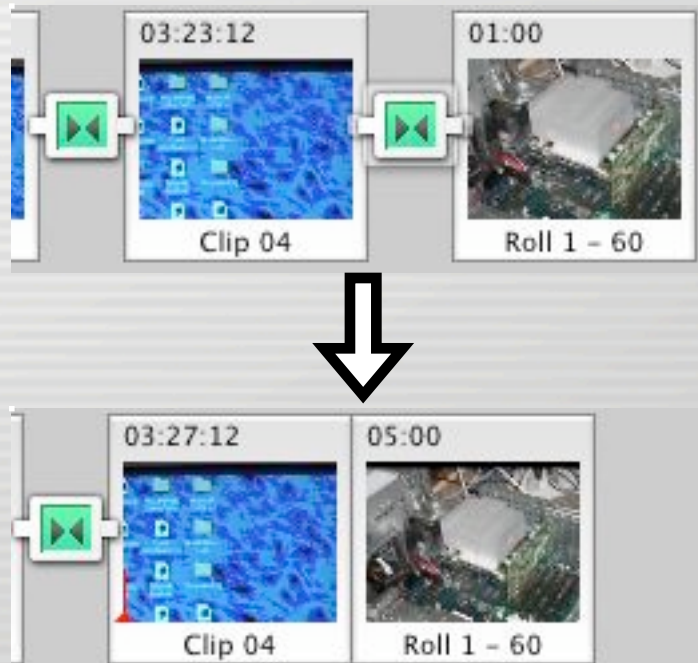


- In Transitions pane, change Speed or direction
- Click Update



Transitions – Delete

- Select transition
- Press Delete key or Edit → Clear



Motion Effects

- **Reverse**

- Select clip
- Select Advanced → Reverse Clip Direction



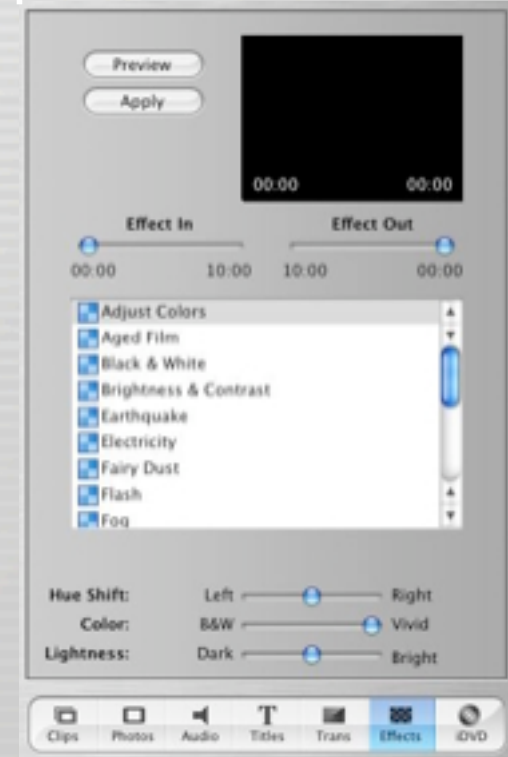
- **Speed up or slow down**

- Select clip or desired portion of clip
- Open Timeline viewer
- Drag rabbit/turtle slider



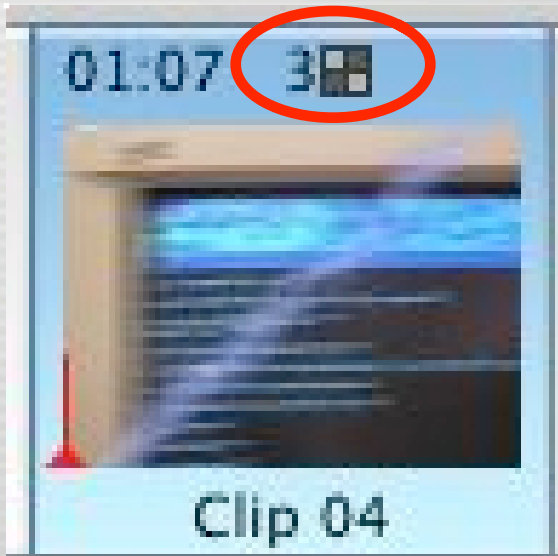
Video Effects – Add

- Select Effects pane
- Select clip or portion of clip
- Change fade in/out
 - 00:00 is instant appear/disappear
- Change options
 - Direction, location, etc
- Click Preview
- Click Apply



Video Effects

- Clips can have more than one effect
 - Number of effects shown at top of clip



Video Effects – Delete

- If you haven't saved or emptied the iMovie Trash
- Select clip with effect
- Select Advanced → Restore Clip



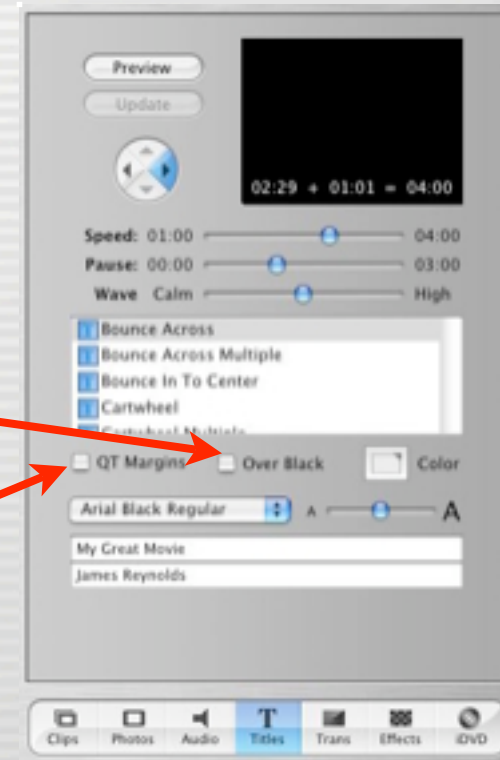
Titles – Add

- Select Titles pane
- Select type of title
- Type text
- Choose font, size, color
- Speed slider sets in/out speed
- Set pause
- Set direction if possible
- Click Preview



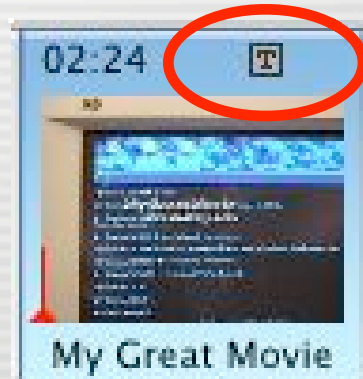
Titles – Add

- **Over black**
 - **Click Over Black**
 - Otherwise it is over video
- **QT Margins**
 - Changes margins
 - QT is full window
 - Otherwise it is TV margins
- **Drag title to clip**



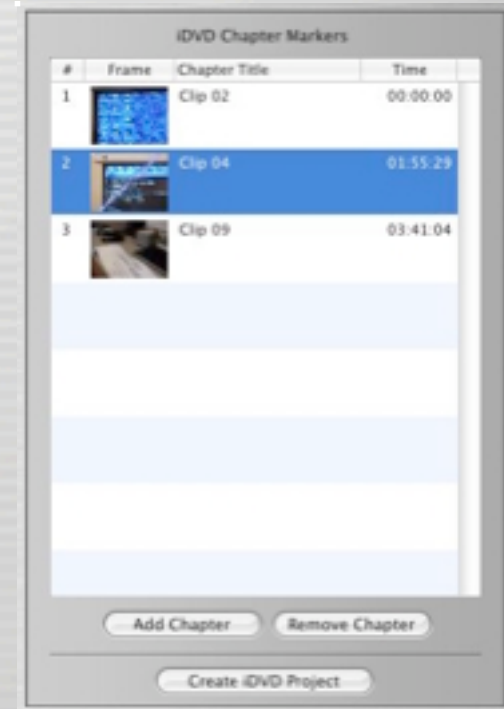
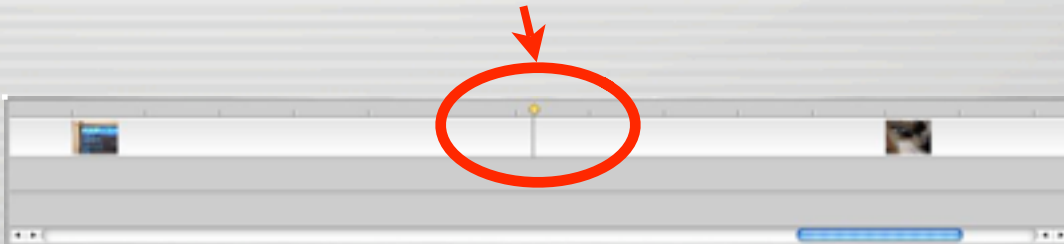
Titles – Delete

- Click on clip with text and hit delete key



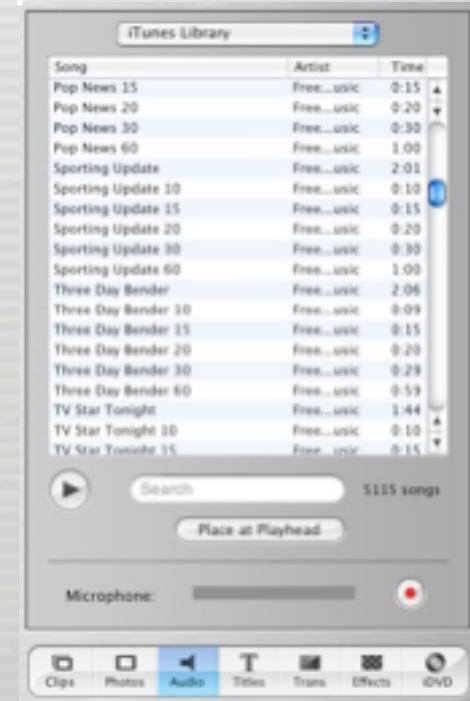
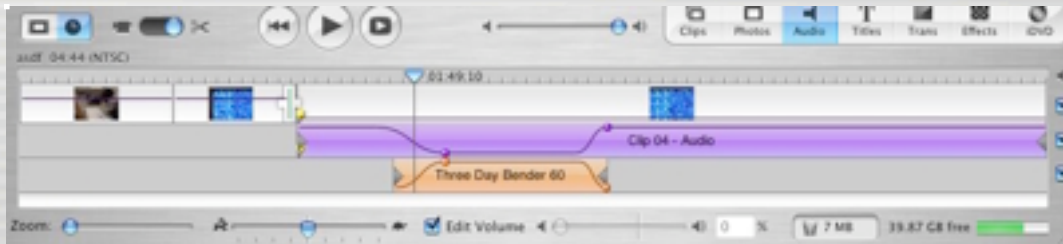
Chapter markers

- Makes DVD chapters
- Move play head to desired location
- Click Add Chapter
- Set name
- **Timeline viewer diamonds**



Audio

- Finish video before working on audio!!!
- Click Audio Pane
- Select Timeline Viewer

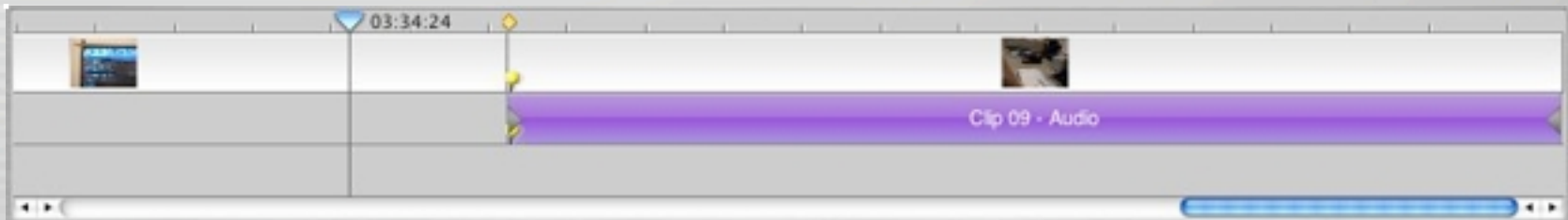
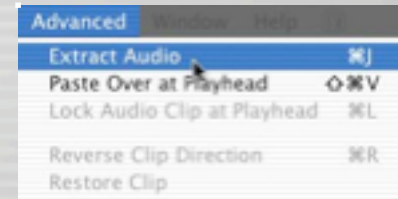


Audio – Add

- **Four sources of sound**
 - **Audio track included with imported video**
 - **Sound effects included with iMovie**
 - **CD or iTunes**
 - **Record your own**

Audio – Add

- Audio track included with imported video
 - Select the video clip
 - Click Advanced → Extract Audio
 - Audio clip appears below video clip

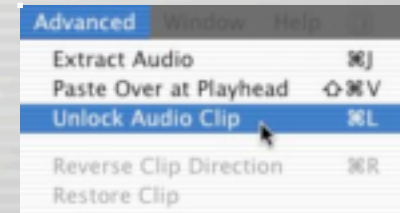


Audio – Add

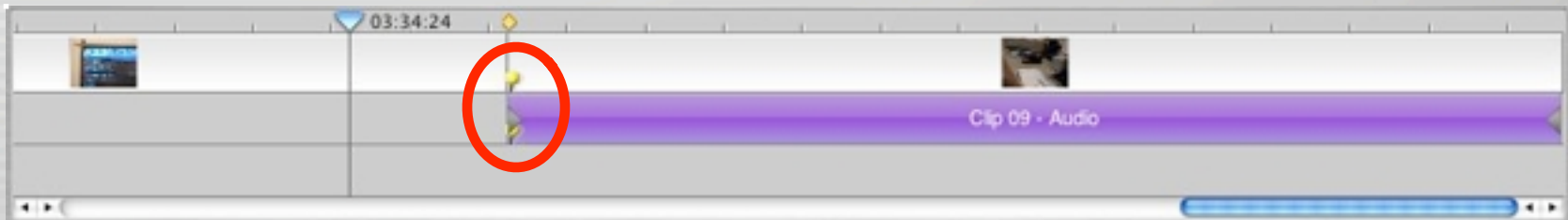
- Audio track included with imported video

- Video clip is muted, not stripped

- Audio is “Locked” to video

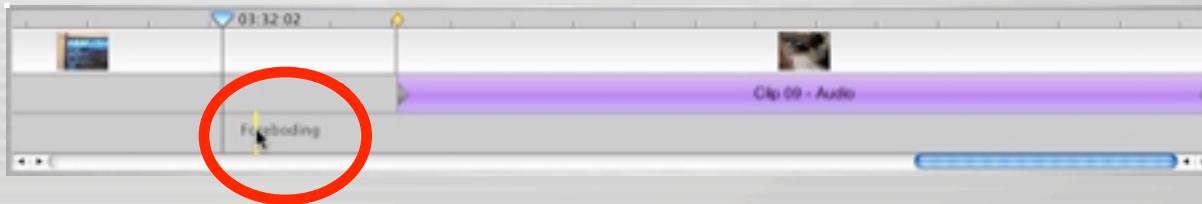


- To unlock, select Advanced → Unlock Audio Clip



Audio – Add

- Sound effects included with iMovie
 - Select “iMovie Sound Effects”
 - Select a sound and drag to Timeline Viewer
 - Demo of sounds...



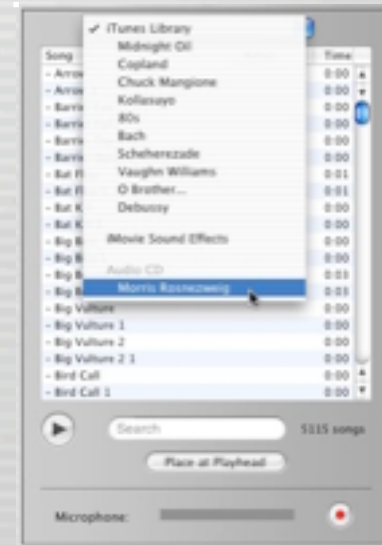
Audio – Add

- **Sound effects included with iMovie**
 - **Skywalker Sound and iMovie sound demo**



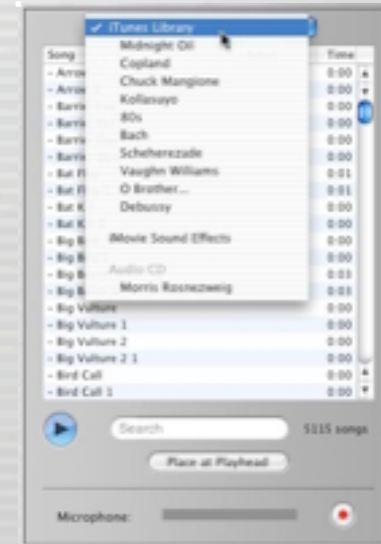
Audio – Add

- CD
 - Insert CD
 - Select CD in popup
 - Select track and drag
 - Or click “Place at Playhead”



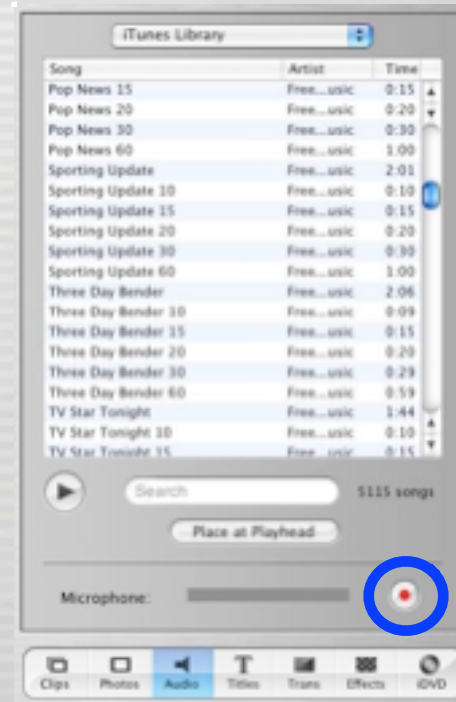
Audio – Add

- iTunes
 - Select iTunes in popup
 - Select track and drag
 - Or click “Place at Playhead”
 - AIFF, MP3, WAV formats



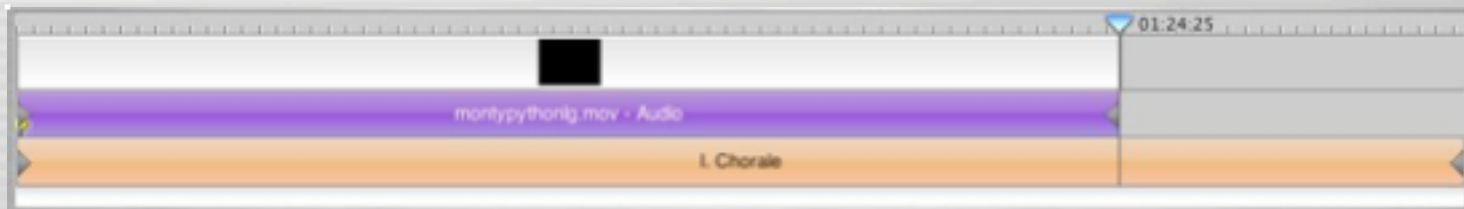
Audio – Add

- Record your own
 - Get a microphone
 - Move playhead to desired location
 - Click record button
 - If meter turns red, you are too loud
 - Click stop button
 - Same button



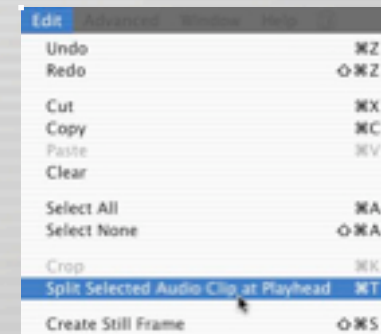
Audio – Move

- **Click audio clip and drag**
 - Beginning frame shown in monitor
- **Drag it to either audio track if desired**
 - Top track is default extracted audio location
 - Bottom track is default imported audio location



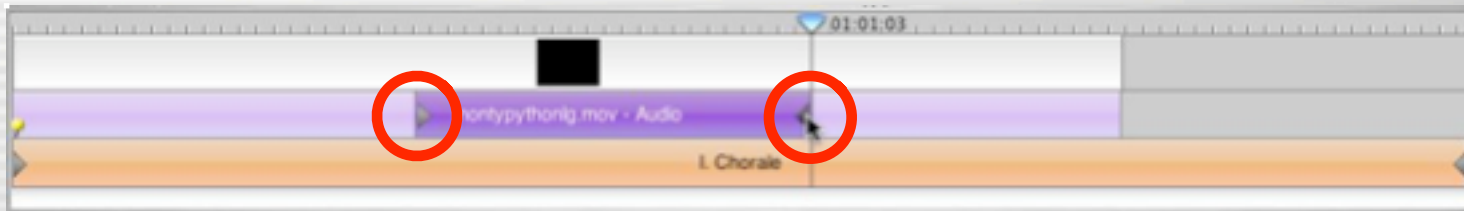
Audio – Delete/Crop

- To delete entire clip
 - Click on clip and press delete key
- To crop clip (method 1)
 - Move playhead to desired cut location
 - Select Edit → Split Selected Audio Clip at Playhead
 - Click on unwanted half
 - Press delete key

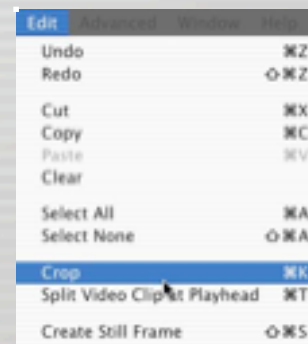


Audio – Delete/Crop

- To crop clip (method 2)
 - Select audio clip
 - Drag crop markers to shorten clip



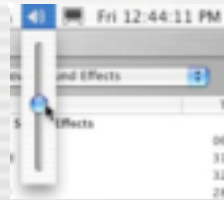
- Select Edit → Crop



Audio – Volume

- To change computer volume

- Menu

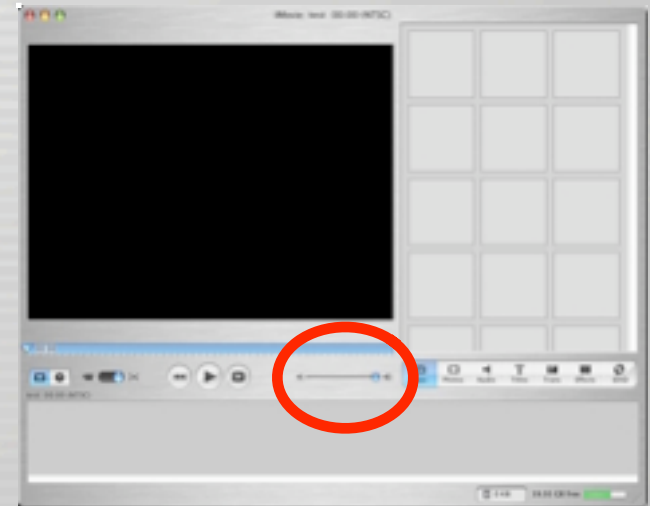


- Keyboard



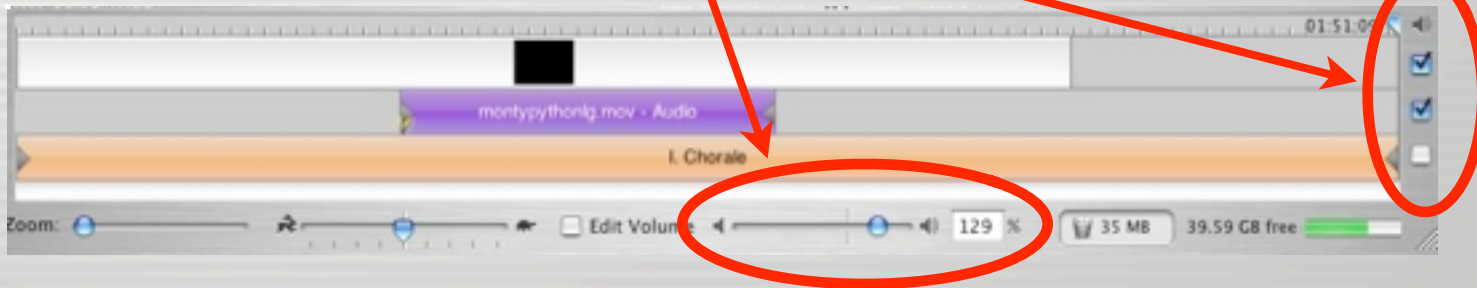
- To change movie volume

- iMovie window



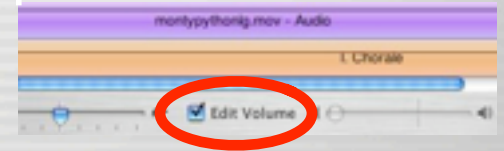
Audio – Clip volume

- Select clip
- Adjust volume slider (below Timeline window, not above)
- Mute track

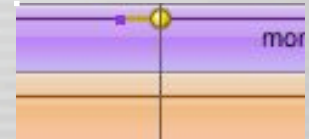


Audio – Clip envelope

- Click Edit Volume checkbox



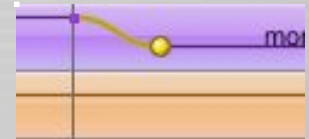
- Click the line at desired location



- Drag dot up or down

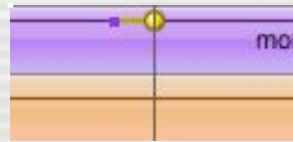


- Change slope with smaller dot

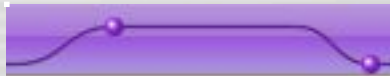


Audio – Clip envelope

- To remove, click dot and press delete



- Use this to add fade in and fade out

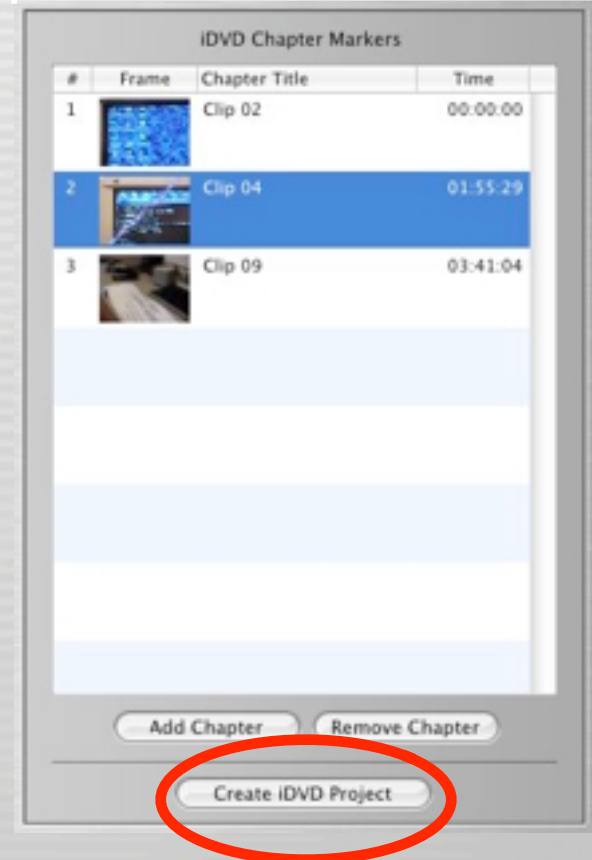


Export movie

- **Burn to a DVD**
- **Save to DV tape**
 - **Storage**
 - **Send to VCR**
- **Save as a file**
 - **Put it on the web**
 - **Send in email**

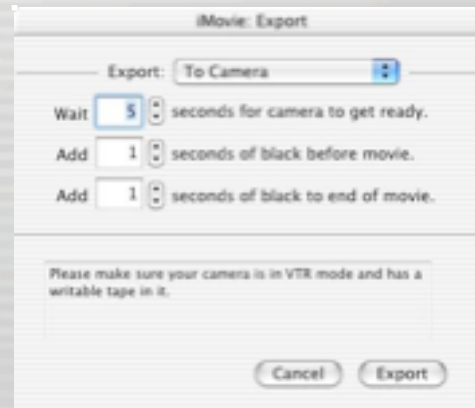
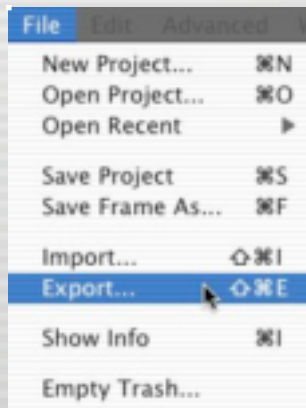
Export movie – iDVD

- Open iDVD pane
- Click “Create iDVD Project”
- Wait
- Open iDVD and burn



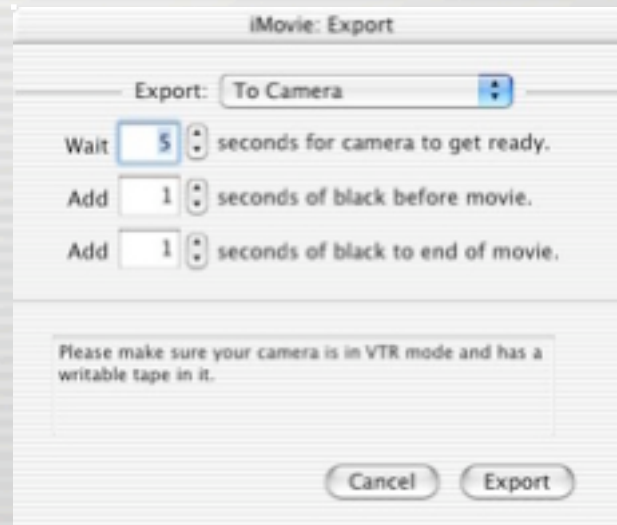
Export movie – DV tape

- Connect camcorder to computer
- Put DV tape in camcorder
- Put camcorder in VTR mode
- Select File → Export → To Camera



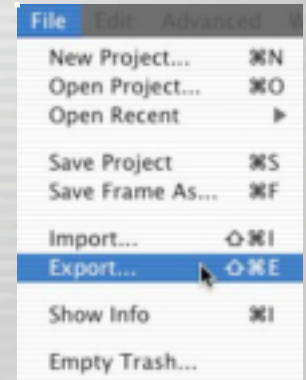
Export movie – DV tape

- Set seconds to wait for camcorder
- Set seconds of black time
- Wait (this is a 1x process)



Export movie – File

- Select File → Export → to Quicktime
- Select format
 - Email
 - Web
 - Web Streaming
 - CD-ROM
 - Full Quality DV
 - Expert Settings



Let's play!

- **But first...**
 - **Questions and answers**
 - **Next class**
 - **More information on the web**
 - **Contact info**
 - **Survey**



Questions and Answers



Next class...

- **Tuesday, April 15th, 1–3 PM, MMC 1745**
- **Introduction to editing and distribution**
 - **How to import**
 - **How to edit**
 - **How to publish**



This info on the web

- <http://www.macos.utah.edu>
- Click on “Documentation”
- Click on “Digital video”



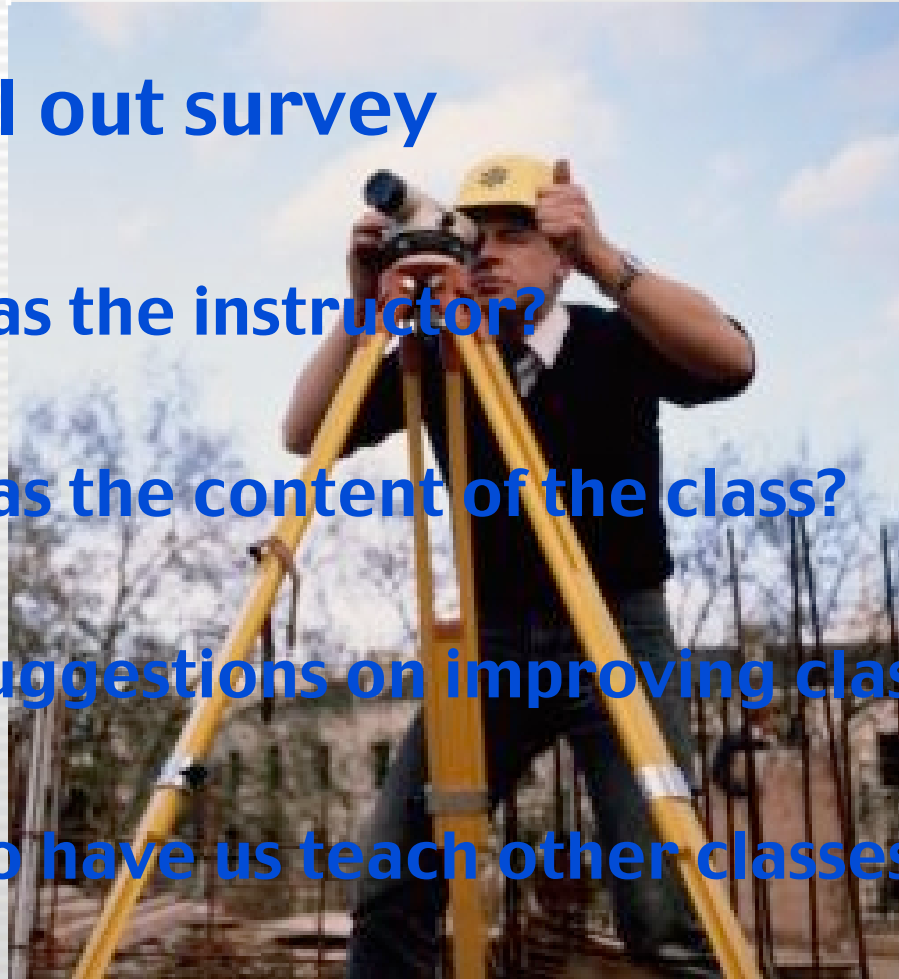
Contact

- Web – www.macos.utah.edu
- Email – mac@scl.utah.edu



Survey

- Please fill out survey
 - How was the instructor?
 - How was the content of the class?
 - Have suggestions on improving classes?
 - Want to have us teach other classes?



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Let's play!

- Now lets play

