# Moving Images Day 2

*Apple Final Cut Pro*

- **Windows**
  - *Window > Arrange > Standard*
  - clockwise from top left
  - browser
    - shows all media available in project
    - anything you want to use should come from here
  - viewer
    - shows attributes of media
  - canvas
    - shows a particular point in the project
    - where the edit line is on the canvas
  - meters/tools
    - meters show volume of the audio at the current time
    - tools provide various tools for manipulating project components
  - timeline
    - shows the arrangement of media in time and layers
    - tied to the canvas

- **Clips, Sequences, Instances**
  - Clips
    - captured video, audio or still image
    - located in browser window
    - can be used multiple times in one project with different settings
    - open into viewer when double-clicked
    - not contained within the project, but linked to it
      - files must be kept where FCP can find them
      - copy all media files that aren't captured video to the same drive as your project file
  - Sequences
    - where you arrange clips to make your video
    - also located in browser window
    - open into timeline and canvas when double clicked
  - Instances
    - each time a master clip (in the browser) is used in the timeline, you get an instance of that clip
    - settings on one instance do not affect other instances
    - deleting a master clip deletes the content of all instances of that clip
    - relinking a master clip alters the content of all instances of that clip

- **Moving around in a clip**
  - video clip
    - double click from the browser to open the clip in the viewer
    - note that view changes name to “Viewer: CLIP in PROJECT”
      - for the clip “dance1.mov” in project “party time” it reads “Viewer: dance1.mov in party time”
      - this shows that you're working with a new copy of the master clip, not an existing instance
      - if the name is “Viewer: CLIP from SEQUENCE”, you're working with an instance, usually opened from the timeline
    - buttons under video (from left)
      - go to previous edit
      - play in to out
      - play/pause
      - play around current frame
      - go to next edit
    - scrub wheel
      - move back and forth in video by dragging
    - slider
      - hold right of center to play forward
      - further to right plays faster
- hold left of center to play backward
- further to left reverses faster
- release to pause
- current time
  - top right above video image
- duration
  - top left above video image
  - displays time between in and out points
- edit line/playback head
  - yellow triangle with a vertical line below
  - shows current frame location relative to entire clip length
  - can be dragged to scroll through clip
- left arrow key
  - moves back (earlier) one frame at a time
  - hold shift to move one second at a time
- right arrow key
  - moves forward (later) one frame at a time
  - hold shift to move one second at a time

Selecting a portion of a clip
- to select a portion, you must define the in (start) and out (finish)points
  - default is in point at the clip's first frame and out point at the last
  - in point must be before out point
    - attempting to set in point later than out point resets the out point so that it can work
  - setting in point
    - find the first frame you want to use by moving through the clip
      - “mark in”
        - left half of oval button
        - or “i” on keyboard
        - or Mark > Mark in
    - find the last frame you want to use by moving through the clip
      - “mark out”
        - right half of oval button
        - or “o” on keyboard
        - or Mark > Mark out
  - notice the white strip under the video image becomes gray to the left of the in point and right of
    the out point and that there are symbols added to indicate in and out points

Ways to add the selected clip to a sequence
- drag to canvas
  - popup menu appears
  - clip is placed where the edit line is in the timeline
  - destination track is determined by control to left of track name in timeline
    - drag to the target track to change
  - edit types
    - insert
      - creates space for the new clip by moving any clips on the destination track after the edit line
        later in time
      - maintains the position of any clips before the edit line
      - increases overall duration of video on timeline by length of new clip
      - if the edit line is in the middle of a clip
        - one track video/two audio – splits existing clip into two parts to create space
        - multiple video tracks/more than two audio tracks – will refuse to make the edit
    - overwrite
      - replaces any existing clip on the destination track at the edit line within the duration of the
        new clip with the new clip
      - maintains the position of any clips before the edit line
      - maintains overall duration of video on timeline if new clip is shorter than remaining duration
after edit line
- superimpose
  - adds a video track above all existing tracks then performs an overwrite edit on the new track with the new clip
  - maintains overall duration of video on timeline if new clip is shorter than remaining duration after edit line
  - does not remove any existing clips (but does hide clips in tracks below the new clip)
- fit to fill
  - changes the speed of the new clip to fit the destination
  - requires you to set in and out points on the timeline as well as in the source clip
    - in and out points on timeline not required if you are using fit to fill with the edit line in a gap between two existing clips
- drag to timeline
  - insert
    - hold clip over top third of destination track
      - cursor turns into forward pointing arrow
      - release mouse to perform insert edit
    - functions like insert edit when using canvas popup menu except that insert takes place at cursor location rather than edit line
  - overwrite
    - hold clip over lower two-thirds of destination track
      - cursor turns into downward pointing arrow
      - release mouse to perform overwrite edit
    - functions like overwrite edit when using canvas popup menu except that overwrite takes place at cursor location rather than edit line
- superimpose
  - drop clip in timeline window above existing tracks
  - functions like superimpose edit when using canvas popup menu except that edit takes place at cursor location rather than edit line
- canvas buttons
  - below video image in canvas window
  - same features as canvas popup menu
  - take effect at edit line just like canvas popup menu

- Altering clips in a sequence
  - audio/video link
    - if chain icon in timeline is green audio and video selection is linked by default
    - prevents loss of sound sync unless desired
    - click chain icon to toggle linked selection on/off
    - to toggle linking on selected clips
      - Modify > Link
      - Command-L
    - red numbers next to clip name mean audio and video are out of sync by time shown
  - snapping
    - if two arrows together icon in timeline is green, snapping is turned on
    - clips will snap end to end or to the edit line
    - prevents gaps or removal of frames from accidental overlap when dragging clips
    - sometimes is better to turn off to allow slight offsets with multiple tracks
    - click icon to toggle snapping on/off
      - or View > Snapping
      - or “n” on keyboard
  - razor blade
    - located in tool palette, 6 tools from top
    - or “b” on keyboard
    - position over clip in timeline and click to split one clip into two – new in and out points are automatically created
    - snaps to edit line to allow precise cuts
- razor all tool is behind razor tool
  - cuts all clips in timeline at time clicked
  - “bb” on keyboard to select
- open in viewer
  - with the arrow tool (“a” on keyboard, top tool in tools palette) double click a clip
  - it will open in the viewer, where you can change in and out points on that instance of the clip
- deleting
  - select clip
  - delete (backspace) removes clip and leaves a gap
  - delete (small delete key next to “end” on keyboard) removes clip and closes gap if possible without disturbing other tracks
- rearranging
  - clips can be dragged around the timeline for overwrite edits
  - option-drag
    - over non-neighbor clip - duplicate and make an insert edit
    - over neighbor clip – split neighbor clip at edit, swap dragged clip with first part of neighbor clip
    - drag to new track to create a superimpose edit
- gaps
  - space between clips created by deleting, adding or moving clips
  - video is black, sound is silent
  - proper thing is to fill with a slug if you want a gap in the video
    - fit to fill edit with slug
  - to remove
    - click in gap and press delete on keyboard
    - or control-click in gap then select “close gap” from popup menu
- changing speeds
  - select clip
  - Modify > Speed
  - or Command-J
  - percentages greater than 100 are increase in speed, less than 100 a decrease
  - set percentage to 100 to restore original speed
  - “reverse” checkbox runs video backwards if selected
  - “frame blending” checkbox controls how new frames appear when speed is changed
- copying
  - select clip
  - Edit > Copy
  - or Command-C
  - makes a copy of the selected clip onto the clipboard so it can be pasted
- pasting
  - place edit line at desired location
  - set destination track to desired track
  - Edit > Paste
  - or Command-V
  - performs an overwrite edit with the clip on the clipboard at the edit line

- Moving around in a sequence
  - canvas and timeline timecode always starts at 01:00:00:00
  - same controls in the canvas window as in the viewer
  - in the timeline window
    - left and right arrow keys function just as in the viewer
    - drag the edit line in the numbered area at the top of the timeline window to scrub through video
    - Command-plus zooms in on the timeline (shows a shorter amount of time in the window)
    - Command-minus zooms out on the timeline (shows a larger amount of time in the window)
    - Shift-Z zooms the timeline to show all clips on the timeline (in or out as appropriate)
    - Track height can be toggled with the vertical bars at the lower left
    - Slider to the right of track height also can change zoom
    - Timecode to the top left of the window shows current time