Exam Objectives

FMC and Apple conducted research to identify the foundational skills students need to effectively communicate using Final Cut Pro and using it to edit broadcast and professional content.

Based on feedback from educators, video editing departments, businesses, and educational institutions around the world, the objectives cover entry-level skill expectations for someone looking to create content for broadcast and feature film.

An individual earning this certification has approximately 150 - 200 hours of instruction and hands-on experience with the product, and is familiar with product features and capabilities, as well as relevant career concepts as it relates to social media.

The exam is 60 questions and 75 min long. Below you will see the various topics covered within the exam and the breakdown of topic frequency by percentage.

General Industry Knowledge – 10%

- **Commercial Use**
    - Know how Creative Commons work and what the symbols mean (questions to be added to social but captured in google doc)

- **Video Formats**
    - Know about standard HD, 4K, 8K, and DCI sizes

- **Frame Rates**
  - Know about popular frame rates and why they are used

- **Editing**
  - Know about the various stages of editing/post production and when they occur in post

- **Terminology**
  - Aspect ratio
  - White Balance
  - Bit rate
  - Bit depth
  - Color space
  - Rule of Thirds
  - Composition
  - Pan, Tilt, Zoom
  - Close Up and Medium Wide
  - Shot List
  - Storyboard
  - J Cut and L Cut
  - Incoming Clip and Outgoing Clip
  - A and B Side of Edit
  - Assembly
  - Foley
  - Offline and Online
  - Continuity
  - Cutaway
  - Foley
  - Sync
  - Multicam best practices

Preferences and Customization – 5%

- **Changing Preferences**
  - Know how to change the timing of when the background renderer starts
  - Know how to change the default stills duration
  - Know how to change pre and post roll durations

- ○ Know How to adjust default transition durations
- ○ Know how and why to change the Viewer background (e.g. checkerboard)
- ○ Know how to change the default color effect (ie: Color Wheels)
- ○ Know how to Change Import Settings and what they affect
- ○ Know different ways to access Destination Preferences
- ○ Know what selecting detailed trimming feedback activates/deactivates
- ○ Know what position playhead after edit operation does and why you'd want to deactivate it
- ○ Know how to enable/disable dropped frame warnings

- **Changing Layouts**

  - ○ Know how to open and close windows
  - ○ Know how to open the Event Viewer
  - ○ Know how to access, save, and revert a Workspaces
  - ○ Know how to access the Workspace storage location
  - ○ Know how to access Project and Source Timecode as well as Differences
  - ○ Know how to add Windows to a secondary display
  - ○ Know How to Bring up Project and Source Timecode
  - ○ Know how to access AV output and why
  - ○ Know how to Use your iPad as a secondary display (sidecar vs. universal control?)

- **Customizing Keyboards**

  - ○ Know how to customize key commands
  - ○ Know how Keyboard command sets are saved (ie: duplicate keyboard)
  - ○ Demonstrate several ways to find what a keyboard command is mapped to

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Import and Organize – 10%

- **Creating a Library and Event**

  - ○ Know how to create, open,close and locate a Library
  - ○ Know how to rename, create, and merge Events

- **Importing Clips**

  - ○ Navigating efficiently to different places on your computer
  - ○ Previewing Clips (list vs thumbnails?)
  - ○ Copying Vs Leaving Files in Place (when, why, why not available)

- ○ Know how to target or create new events on import
- ○ Know how you can create Keyword Collections from System Organization
- ○ Know how to create Optimized or proxy media
- ○ Know why you'd want to create a particular proxy Codec
- ○ Know the different options to switch to Proxy/Optimized Media
- ○ Know how to set up automation on import (Color and Sound Analysis)
- ○ Know how to track import process through background tasks
- ○ Know how to assign Audio Roles for selected clips
- ○ What are iXML tags and analyzing them
- ○ Know how to import XMLs
- ○ Know how to open Camera archives
- ○ Know about plugins for importing certain formats?
- ○ Importing Cinematic iPhone shots to keep metadata
- ○ Importing ranges, when you can do it and when you can't and why

- ● **Organize Clips**

  - ○ Know how clips are organized in a default Library with Library Smart Collections and sort options.
  - ○ Know ways to create keyword collections for a full clip or range.
  - ○ Know how to rate/unrate clips: make favorites or reject clips and clip ranges
  - ○ Know why and how to switch between List and column View
  - ○ How to use filtering options in the browser
  - ○ Know how to reveal where files are stored on your system
  - ○ Know how to work with the Keyword Editor
  - ○ Know how to apply Keywords with Shortcuts
  - ○ Know how to remove Keywords from a clip
  - ○ Know how to remove, add and change the order of columns
  - ○ Know how to search for clips in ascending and descending order
  - ○ Know how to create a Missing Media and People smart collection
  - ○ Know how to create additional Smart Collections and Library Smart Collections meeting multiple search criteria
  - ○ Demonstrate how to create an unused media smart collection
  - ○ Know how to search for clips by media representation
  - ○ Know how to troubleshoot finding clips in the Browser
  - ○ Know how to work with Metadata and Custom Metadata Views
  - ○ Know how to modify and create custom column layouts
  - ○ Know how to create Smart Collections for Multicam and Compound Clips
  - ○ Know how to add more Metadata fields to a view
  - ○ Workflows on using Notes

Creating Projects, Editing Video and Timeline Organization – 10%

- **Playing back and marking clips in the browser**
  - Know how to effectively playback a clip (spacebar, JKL, continuous playback, skimming)
  - Know how the main settings of Clip Appearance work and how it can help with making clip selections (Shift-Z to shorten filmstrips to thumbnails - then later, same shortcut to fit Viewer to window and timeline to window)
  - Know how to make range in and out selections, clear them and play your selection.
  - Playing clips in slow motion (j,k.ll)

- **Creating Projects**
  - Know ways to create projects from a clip's settings
  - Know how to create a non-standard aspect ratio projects for social media
  - Know where to access Project Settings
  - Know the differences between duplicate and duplicate as Snapshot projects

- **Assembling a Rough Cut**
  - Know how drag and drop editing works and keyboard shortcuts
  - Know the differences among append, insert, overwrite, and connected clips
  - Know how to edit a video or audio source only (more questions, troubleshooting)
  - Know how to create a freeze frame, hold frame, and add gap clips
  - Know how to undo editing operations
  - Know how to rearrange shots in the timeline by dragging them or using copy and paste procedures
  - Know how the Position tool differs from the Selection tool)
  - Know how to effectively move around your Project (Shift-Z, Command +/-, scroll bar, hand tool)
  - Know how and why to adjust Clip Appearance
  - Know how to get iPhone HDR footage to look correct in a FCP SDR timeline
  - Know how to perform an overwrite edit
  - Know how to backtime edits
  - Know all the different ways to replace clips in the timeline
  - Know how to make Multiple Clip Selections
  - Know how to use J,K,L
  - Know how to Change a Connect edit point
  - More questions on the Replace edit

- **Trim Clips in the Timeline**
  - Know how to remove or add frames to a shot (ie: top and tail and dragging edit points)
  - Know how to visually identify if a clip is out of handles
  - Know how to expand and separate audio and perform split edits
  - Know how to check and change the duration of stills and titles effectively
  - Know how to effectively remove content from the timeline
  - Know the best uses for the Blade Tool
  - Know how to use the Trim tool to perform a Roll edit
  - Know how to use the Trim tool to perform a Slip edit
  - Know how to use Trim Start and Trim End
  - Know how to work in the precision editor
  - Know how to perform a slide edit
  - Know how the precision editor works
  - Know how and why to use play around
  - Know how to trim selection
  - Know how to join clips
  - Know how and where you can nudge clips
  - Know how and why you'd want to work with the Position tool
  - Know how to move your play head and change clip/edits using change duration
  - Know how and why you'd want to lift a clip from the primary storyline
  - Understanding the difference between the skimmer and the playhead
  - Understand skimming vs. clip skimming
  - Know how to join a through edit
  - Know how to work with Dupe Detection
  - Swapping with connected clips staying in place

- **Working with Markers**
  - Know how to create markers
  - Know how to Modify and delete Markers (inc to do markers and chapter markers, broadcast probably doesn't need chapter markers)
  - Know how to navigate between and nudge markers
  - Know how to mark markers as complete

- **Working with the Timeline Index and Roles**
  - Know where to open the Timeline Index
  - Know how to perform searches for Video, Audio and Titles
  - Know how to perform searches based on Keywords, Marker Type and Analysis
  - Know how to Create and Edit Roles
  - Know how to Change Role Color
  - Know the benefits of deactivating roles/sub roles vs disabling

○ Timeline Index Find Feature

● **Timeline Management and History**

○ Know how to duplicate projects in timeline and close other projects
○ Know how to navigate between projects and compound clips
○ Know how to show Project Settings
○ Know how to change markers as complete

Working with Sound – 5%

● **Monitor sound**

○ Turn on and Off Audio Waveforms and changing size in timeline with clip appearance
○ Bring up Audio Meters
○ Solo or Mute Sound from clips
○ Know how to identify Sound colors on waveform (yellow and red)
○ Know about audio skimming

● **Changing *Audio Configuration***

○ Work in inspector or timeline to change audio configuration (ie: changing stereo to mono)
○ Creating Sync Clips with Dual System Sound
○ Know how to playback and mute a track on a dual mono clip
○ Know how to display a the separate tracks of a surround sound music effect

● **Adjusting Volume**

○ Lowering Sound Volume for Clips: dragging in timeline, using the Audio Inspector
○ Adding Audio Fade in and Outs
○ Creating Audio Ducks Effectively
○ Create audio crossfades
○ Modifying Pan
○ Modifying Surround Pan
○ Match Audio
○ How to open and read audio meters
○ Dual mono vs. Stereo

- **Dealing with Problematic Sound**

    - Know how to automatically check for problematic sound
    - Removing Background Noise
    - Removing Hum
    - Amplifying Sound
    - Know how to work with Machine Learning Effect [voice isolation!]

- **Working with Audio Roles, Lanes, and Compound Clips**

    - Know how to modify an Audio Role
    - Know how and why you'd want to show Audio Lanes
    - Know that You can't delete Audio Roles
    - Know how to merge and move subroles
    - Know how to show different audio component of a Compound clip
    - Work with Clips that MixdownWorking with Mixdown clips in compound clips
    - Creating a compound clip to create "buses" for roles (subrole components)

- **Recording Audio**

    - Know where you can record a voice over
    - Know how to adjust the mic you're using to record a voice over
    - Know where the voice over is saved
    - Know how and why you'd want to take advantage of various vo options

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Transforming Clips – 5%

- **Conforming Clips**

    - Understanding Spatial Conform Types
    - Using Smart Conform in social media Projects
    - Enabling Overlays

- **Position, Scaling and Rotating Clips and Graphics with the Transform Tool**

    - Adjusting Clips in the Viewer
    - Zooming in on the Viewer, working with the red overlay and fit-to-window
    - Adjusting Clips in the Inspector

- ○ Resetting ParametersUnderstanding why and how to work with Clip Spatial Conform (ie: 4K clips in an HD timeline)
- ○ Know How to stabilize a clip
- ○ Know how to improve Rolling shutter

● Cropping Clips

- ○ Adjusting Clips in Viewer and Inspector
- ○ Know the Difference Between Crop and Trim
- ○ Know How to Work with Ken Burns
- ○ Enabling and disabling clips
- ○ Name the advantages for working with the distort tool
- ○ Know how to make Ken burns animations to multiple clips at once
- ○ Opacity
- ○ Know how to create an Opacity Fade in in the Timeline
- ○ Know how and why to change blend modes
- ○ Know how blend modes are listed (ie: brighter, darker, 50/50 mix)

Transitions, Speed and Effects – 8%

● Working with Transitions

- ○ Adding transitions
- ○ Modifying, Replacing, Deleting and Manipulating Transitions
- ○ Understanding transition warnings with inappropriate clip handles
- ○ Understanding storyline creation when transitions are added with connected clips
- ○ Know how to change the timing of multiple transitions at once
- ○ Know how to roll a transition
- ○ Know the benefits of working with a transition in the Precision Editor

● Adjusting Clip Speed

- ○ Know how to work with iPhone Slo-Mo Footage and Automatic Speed
- ○ Speed Up or Slow Down Clips
- ○ Create Hold frames
- ○ Know how to do variable/blade speed effects
- ○ Know the differences between hold frame and connect freeze frames (browser)
- ○ Know how to adjust speed transitions
- ○ Know how to reset speed
- ○ Know how and why you'd want to adjust speed quality

- ○ Know how and why you'd want to preserve audio pitch for clips
- ○ Know about some speed effects (ie: jump cut at markers, rewind)

- ● **Applying Video Effects**

  - ○ Adding Effects
  - ○ Adjusting, Resetting, Turning Off and Deleting Effects in The Inspector
  - ○ Pasting Attributes to Other Clips
  - ○ Know how to work with Adding, deleting and resetting Keyframe animation in the inspector
  - ○ Know how to bring up Video Animation and adjust keyframe timing
  - ○ Know how to solo a video animation
  - ○ Understand Effect order and its importance
  - ○ Know how to work with the Object tracker
  - ○ Know how to search and clear effect searches
  - ○ Know how to hide effect categories
  - ○ Know how and why you'd want to work with Compound Clips
  - ○ Know how to break apart Compound Clips
  - ○ Know how to use Audition Clips
  - ○ Know how to work with the FCP Keyer
  - ○ Know how to save Effects Presets
  - ○ Know how Keyframe Timing Works when saving presets
  - ○ Know how to adjust an effects Mix value before applying
  - ○ Know how and why you'd work with render and render selection

- ● **Applying Audio and Sound Effects**

  - ○ Know how to download additional audio content
  - ○ Know how additional audio content can be brought into FCP (Audio sidebar)
  - ○ Know how to apply built in EQ presets
  - ○ Know how to change Graphic EQ bands
  - ○ Know how to apply additional audio effects
  - ○ Know how to access Logic/ Advanced Effect Editor

Multi-cam Video – 2%

- ● **Working with Multi-cam**

  - ○ Know how to create a Multi-cam Clip
  - ○ Know how to reveal the angle editor

- ○ Know how to cut between video and Audio sources only
- ○ Know how to show more clips in angle editor (ie: 2up, 9up) displays and show overlays
- ○ Know how to use Audio for Multi-cam sync
- ○ Know how to reveal, assign and use Angle assembly, clip ordering and angle sync
- ○ Know to open and close angle editor
- ○ Know how to add additional angles
- ○ Know how to Monitor video and audio angles
- ○ Know how to switch active angle
- ○ Know how to sync selection to monitoring angle
- ○ Know how to nudge clips on an assigned angle
- ○ Know Multi-cam clip shortcuts

Color Correction – 10%

- ● **Basic Color Correction**

  - ○ Know how to perform automatic and basic white balance
  - ○ Know how to Match Color
  - ○ Know how to adjust exposure, color and saturation in the color inspector with the color board and color wheels
  - ○ How to apply/remove Camera LUTs - as part of import
  - ○ Know how to work with color and shape masks along with the Object tracker
  - ○ Know multiple ways of applying the main color correction effects (Color wheels, board, Color curves and HSL Curves)
  - ○ Know how to work with and manipulate Color Curves
  - ○ Know how to work with HSL Curves
  - ○ Know how to bring up and rearrange video scopes
  - ○ Know how to turn on Range Check and how to read the information
  - ○ Know how to nudge color correction pucks/controls
  - ○ Know how to take advantage of activating Keyboard shortcuts for applying color effects

- ● **HDR VS SDR**

  - ○ Know the differences and why one or the other might be advantageous
  - ○ Know the difference between the type of available HDR
  - ○ Changing a Library to HDR
  - ○ Create an HDR Project

- ○ Know the difference between HDR Timelines
- ○ Work with HDR Tools [and know which option to choose for iPhone Dolby Vision clips]
- ○ Use Scopes for HDR Content
- ○ How to properly View HDR Content (Monitor)
- ○ Know how to Make Scope Monochrome
- ○ Know how and why you'd want to bring up a certain scope
- ○ Know how to make Scope Monochrome
- ○ Know how to brighten a Scope
- ○ Know how to rearrange the color inspector layout
- ○ Know how the color inspector and Video inspector work together
- ○ Know intuitive way to reset color correction controls
- ○ Know how to work with Orange versus Sat
- ○ Know how to work with Sat vs Sat
- ○ Know how to work with Luma vs sat
- ○ Know how to explaining what's going on in a Color correction effect
- ○ Know how to work with 3D color masks sample vs 2D
- ○ Know how to add or remove from a color mask selection
- ○ Show understanding og steps to perform a Manual Color Match
- ○ Show understanding of steps of performing a neutral color grade (contrast, white balance)

Titles and Generators – 5%

- ● **Working with Titles**
  - ○ Finding and adding titles from the Titles and Generators sidebar (double-click, connect, mark and connect)
  - ○ Know where to find titles prepared for vertical and square
  - ○ Know how to import and display custom overlays
  - ○ Know how to make changes to a title in the viewer and move between Text elements
  - ○ Know the difference between the text and title inspector
  - ○ Know how to make stylistic changes to 2D text
  - ○ Know how to save appearance, format, and 2D styles
  - ○ Know how to work with Gap clips and Placeholders
  - ○ Know how to create a gradient or colored background
  - ○ Know which titles and generators were created in Motion
  - ○ Know how to find and replace Text
  - ○ Know how to work with and troubleshoot Layered PSD files

- Know how to work with Custom Text for animation
- Know how to adjust the position, scale and rotation of 3D titles in the Viewer using OSC's
- Understand how drop zones work
- Know how drop zones timing works
- Know how to apply titles to the Viewer using the Object tracker
- Know how to turn on Title Safe Boundaries
- Know how to troubleshoot video or Titles not being displayed correctly (ie: Alpha, RGB channels)

- **Working with 3-D**

  - Know how to work with 3D Titles Materials
  - Know how to work with 3D titles Lighting
  - Know how to adjust the depth of 3D titles
  - Know how compound clips can help with cutting up/blading a generator template
  - Know how to work with 3D titles
  - Know how to work with the Placeholder graphic
  - Troubleshooting PSD (CMYK)
  - Know how to search fonts quickly
  - Have a title match the duration of a clip you want to connect it to.
  - Know that you can add graphics below and above the primary storyline

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360 Video – 5%

- **Working with 360 Video**

  - Identifying 360 Clips in the browser
  - Accessing 360 View
  - Changing Field of VIew
  - Show 360 Clip Overlays
  - Showing different view modes for Stereoscopic Clips
  - Know about Compatible 360 Headsets
  - Know how to work with the clone tool
  - Know how to Reorient Clips in 360
  - Know how to export 360 metadata
  - Know how to work with 360 clips in a flat timeline
  - Know how to get the fisheye effect

- ○ Understand equirectangular 360 video and stitching

Exporting Video – 5%

- **Converting HD and 4K Video Projects to Vertical or Square**

  - ○ Converting HD and 4K Video Projects to Vertical or Square
  - ○ Duplicating a project
  - ○ Using Smart Conform
  - ○ Troubleshooting Smart Conform issues

- **Working with Closed Captions**

  - ○ Know how to add Closed Captions
  - ○ Understand common Caption format and which ones are used online
  - ○ Know how to import Captions
  - ○ Advantages and disadvantages of burning in captions.
  - ○ Navigating through Captions with the Timeline Index

- **Share Video Projects and Compressor Workflows**

  - ○ Share a range of clips for a project.
  - ○ Share a Master or Social Media Friendly File and Upload
  - ○ Share a single frame.
  - ○ Batch Share Clips
  - ○ Share Video and Audio Roles (multitrack)
  - ○ Know how to access Compressor Templates
  - ○ Know how to create a bundle (multiple questions)
  - ○ Know how to identify which devices your chosen export settings are optimized for
  - ○ Know how to export an XML
  - ○ Know how to Export Captions and Formats
  - ○ Add a Watermark to Video Clips Using Compressor
  - ○ Know how to make a Droplet
  - ○ Know which Compressor settings allow more options than regular destinations
  - ○ Know about the differences between Apple ProRes formats
  - ○ Know how sharing notifications work
  - ○ Know about how to turn off Quick time opening after export

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Pro Apps Workflows with Motion and Compressor – 10 %

- **Motion**
  - Know how to open Motion and create projects that will show up in FCP
  - Know where Motion titles, generators, effects and transitions are saved
  - Know how to convert a Motion project to another type
  - Know how publish parameters in Motion available to someone in FCP
  - Know how categories and themes work
  - Know how to give users options to turn on and off title animation (BUILD IN, AND BUILD OUT)
  - Know how and why to use project loop end markers
  - Know how and why to use a Poster frame marker
  - Know why when you open a title, transition or effect over in to motion why it opens a copy
  - Know how to access the cinematic layout
  - Know about Motion Content
  - Know what the different colors of a transition signify
  - Know how to add and move title behaviors

- **Compressor**
  - Know how to create a Custom Compressor template to use in Final Cut
  - Know how to add Timecode and Watermarks with Compressor
  - Understand how jobs work
  - How and why to create Bundles
  - Know how to access MXF options in FCP
  - Know how padding works for social media
  - Location/installing/removing plugins/templates missing plug-ins by replacing them in the right spot]
  - Exporting HLG HDR with Compressor

Media Management – 5%

- **Libraries**
  - Know how and why you'd want to create a duplicate Library with No Media
  - Know how to delete Generated Library Files
  - Know how to work with and Manage multiple open Libraries

- ○ Know how to access Library Backups x 3

- **Duplication**
  - ○ Know how and why you'd want to create a duplicate project with proxies only

- **Relinking**
  - ○ Know how to Relink Media

- **Merging**
  - ○ Know how to Merge Events

Final Cut Info and Troubleshooting – 5%

- **Preferences**
  - ○ Know how to clear FCP Preferences at launch and where preference are located

- **Info**
  - ○ Know how to find menu commands using the help menu [at social pro level]
  - ○ Know how to see what's new in Final Cut and references online manuals for 3rd party apps [social pro]
  - ○ Know where you can find Final Cut extensions

- **Troubleshooting**
  - ○ Know a few of Apple's 12 recommended troubleshooting steps
    https://support.apple.com/en-us/HT203477