Compressing for DVD authoring:

The purpose of this document is to provide information for compressing FCP data for DVD authoring in our labs.

With the new software we now have a better version of Apple's Compressor and the updated DVD Studio Pro 4. Although the modifications within these programs appear quite rich and worth further investigating, we can, in the mean time, export our movies from FCP HD, compress to .m2v (MPEG-2) and author a Standard Definition DVD.

FYI: Most of the new features in the programs which have compression components are in support of new codecs, especially the rich and delightful H.264, which I highly recommend as a great web codec and potentially a great HDV codec, and of course support for native HD editing and HD DVD authoring.

MPEG-2 and/or Dolby Compression – creating DVD Studio Pro Assets:

When in FCP HD, one will navigate through the menus "FILE \rightarrow EXPORT \rightarrow Using Compressor" Once Compressor launches you will primarily use the "Batch" and "Inspector" windows.

In the "Batch" window, clicking on the title, highlighting it and modifying it as you desire can change the title of the file.

Select a setting by clicking on the "Setting" pull down in the Batch window. The presets are quite good settings. The choices are based on the selection of quality of DVD you want to author. This is related to the length of the material to be burned, so you will notice that there is a "90 minute Best" option and a "120 minute Best option," etc. The closer the selection made to the running time of the DVD material, the better the quality of the DVD (This is because running time and data amounts are directly related and therefore data rates (data per time) are as well). However, if the data rates go above the preset thresholds because of the nature of the encode, there will be an error. You may either select the next "time" preset option up from the one you just tried (If 90 minute option was tried then try 120 minute option) or you can adjust the data rates in the "Inspector" window. In fact, many fine adjustments can be made from the "Inspector" window especially with regards to quality, image size, key frames, aspect ratio ... etc.

While selecting the "setting" pull down you will note that there are different presets for different aspect ratios, as well as different qualities. You may select 48Khz 16bit setting which simply encodes the audio at that sample frequency and bit depth, you may encode the audio with Dolby 2.0, which allows for smaller audio files (you can squeeze more on your DVD or Dolby encode can allow for surround sound options), and you may select the MPEG-2 option for the video. Upon batch completion these will be your assets for DVD Studio Pro.

Note the other preset options under the "Setting" pull down – many refer to HDV and/or H.264 and/or web encoding. Many of these settings also yield favorable results, and tweaking in the "Inspector" window will create a more custom look to your project.

"Destination" is the last required pull down menu. The "Destination" is where the program is going to place these new files. In the pull down there is an "Other" selection, which will allow you to navigate all the hard drives and locate the appropriate folder. Once you select a location on which you have read/write privileges, the warnings will disappear and you may click the "submit " button to begin the encode process.

Additionally:

In order to export your audio for Compressor/Dolby encoding while in FCP HD, one will navigate through the menus

"FILE \rightarrow EXPORT \rightarrow Using Compressor" and follow the instructions above selecting Dolby 2.0 encode from the setting pull down menu which corresponds to you video settings.

OR

"FILE→ EXPORT→ Audio to AIFFs" Select "Stereo Mix" – a single stereo file Or "Channels Grouped" – exports multiple mono or stereo files based on your project's channel groupings

Using Assets in DVD Studio Pro:

Assets are used as in the previous version of DVD Studio Pro. The DVD can be recorded as SD (Standard Definition) or as HD (High Definition). If you are working in 16:9 letterbox or Pan-Scan you can make this selection while your Track is selected.

Using "File \rightarrow Import \rightarrow Asset" you can load the MPEG-2 file and the audio, either in uncompressed or Dolby compressed format. (You can also bring in other file types: MP3 etc. please consult the manual). At this point, please consult your professor, Mark Robinson, DVD Studio Pro manual or reference books throughout the lab.

DVD Studio Pro can also use QuickTime or .mov files. Under "FILE \rightarrow PREFERENCES," selecting the encode tag will give you some control over the MPEG-2 encoding that will be carried out in the background.