1. General Considerations: PDFs, Embedded Files, and Supplementary Files

When you submit your thesis or dissertation electronically, you can enrich your work with digital content such as

- High-resolution color images
- Audio and video clips
- Interactive files
- Datasets

However, you'll need to plan ahead to ensure that readers today and years from now will be able to access that content the way you intended. Get advice and help creating and formatting your digital content by emailing questions and concerns to etd@ku.edu, or see the list of resources at the end of this document.

The primary document submitted as the thesis or dissertation must be in Adobe PDF format. The file should not require any external software applications, fonts, or other information. This helps assure that the file will remain usable far into the future. Make sure that your settings include:

- 600 dpi resolution
- Print optimized
- Embedded fonts: All fonts used must be embedded in the document. This means that all of the font information used to make your document look the way it does is stored in the PDF file (otherwise, it may not be available on the computer being used by someone who wants to read it). See PDF instructions at http://www.lib.ku.edu/technology/PDF for further information.

Supplementary Files:

Submit media files other than still images as supplementary files ("Associated" files in the submission process), not embedded in the PDF. PDF viewing software (e.g., Adobe Reader) does not include the applications needed to read most media formats. Use the text of your PDF file to refer to those supplementary files, but do not embed or try to link to them.

Still Images and Illustrations:

- Adobe Reader and other PDF viewers can render most still images, which can therefore be embedded directly into your PDF file. To keep the file size of your PDF manageable, embed a smaller, lower-resolution file (JPEG format) into the PDF and add supplementary files as larger, higher-resolution versions (TIFF format).
- If you prefer to embed high-resolution images in PDF files, start with high-quality TIFF files and then edit the Adobe PDF Settings for the images, turning off down-sampling and compression for all three image types (color, grayscale and monochrome).

2. File Formats and Longevity:

Some file formats are more likely to remain usable over long periods of time than others. In general, file formats that are not proprietary (not owned by a corporation), that use open standards, or that are very common (a large base of users) are more likely to remain usable over time.

In general, prefer the following formats: Images:

Images	Video	Audio
GIF (.gif)	Apple Quick Time (.mov)	AIF (.aif)
JPEG (.jpeg)	Microsoft Audio Video Interleaved (.avi)	MIDI (.midi)
TIFF (.tif)	MPEG (.mpg)	MPEG-2
		SND (.snd)
		WAV (.wav)

For further guidance on selecting file formats and other digital content standards, see:

- KU ScholarWorks Supported Formats: http://kuscholarworks.ku.edu/dspace/help/formats.jsp
- Recommended Standards and Best Practices for Digital Projects: http://cds.lib.ku.edu/

3. Creating Images and Multimedia: Where to Find Equipment and Assistance Equipment:

- Public Scanning Equipment and Digitization Software in the KU Libraries: http://www.lib.ku.edu/technology/PublicGuideToScanners.pdf
- KU Computer Labs: http://technology.ku.edu/computer-labs
- KU Medical Center Computer Facilities: 1040 Dykes Library (call 7166 to reserve the room)

Consultation, Workshops, and Help:

- Computing Help Desk (http://www.ku.edu/~helpdesk/): help and troubleshooting for technology problems by phone (864-0200) or email (question@ku.edu).
- Instructional Services (http://www.lib.ku.edu/instruction/): instruction and assistance on Acrobat and other software applications, technology, and research tools. (Look for PDF: Power Hour on their workshop schedule.)
- Digital Initiatives (http://kudiglib.ku.edu/): consultation and planning assistance for digital projects.
- Instructional Development and Support (http://www.ku.edu/~ids/): assistance in creating, maintaining, and improving learning environments, both physical and virtual. [an error occurred while processing this directive]