



# Managing Files & Content

July 2011

Course materials are created using many types of software and the files are generated in different formats. Materials that contain pictures, sound and/or video will be much larger files than those containing just text and numbers. As you create materials for your course you should first determine what type of content will best serve the objectives of your course and learning styles of your students. Once that is determined you need to know understand where files should be stored to give students access to them and to best use the resources available to you at ICC.

## What difference does it make?

Some files require specific software to open them and students will need to have that software available to use your materials. Some files can be edited and should only be used when students need to make changes or additions to a file. Some files are very large in size and can be difficult to open when Internet connections are slow. Some files are created using software that very few people have access to and can't easily be converted to a more readily available format.

## File Extensions

If you create a document using Microsoft Word and save it in the most current format it will be named something like --

2011 Blackboard Syllabus.**docx**

In this example **docx** is the file extension. It indicates it is a file created with MS Word 2007 or later. It can be read and edited by any word processor that is compatible with that format. Extensions are important because they let you know what needs to be used to look at or edit a file.

## Documents

If you are creating something that is mainly text, includes some tables of information, some graphs to illustrate a point, a table of contents, and/or lists of items -- you should use a word processor to create a document. ICC is a Microsoft campus so the most common word processing tool is Word 2010. Documents with file extensions of .doc and .docx can easily be read by Word 2010. Word can also open each of the formats listed in the table to the right. Other formats that can be read are .rtf (Rich Text Format) and .txt (Text Format) -- these can be created by any word processor, but formatting options are very limited.

**If you are creating a document that students must open and add information to save it as a .doc or .docx.**

Word 2007+	docx
Word 97 - 2003	doc
OpenOffice Writer	odt
WordPerfect 5.x	doc
WordPerfect 6.x	wpd
MS Works	wps

## Portable Document Format

If you are creating a document that is to be viewed by students and not edited, such as a syllabus, save it as a .pdf (portable document format). This format requires Adobe Reader, which is free to download, to view the file. Adobe Reader runs on all computers and platforms so .pdf files are very portable from device to device. All of the Microsoft Office products provide a Save As....option which allows you to create .pdf files from your original documents. All text, tables, images and formatting will be saved. You need to keep a copy of the document in its original form as well because you won't be able to edit the .pdf to make changes in the future.

## Spreadsheets

Spreadsheets are designed to perform calculations and to sort information. Microsoft Excel is the most common spreadsheet application on computers at ICC. OpenOffice also has a spreadsheet application, Calc.

Excel 2007+	xlsx
Excel 97 - 2003	xls
OpenOffice Calc	ods

Many programs output files in .csv (Comma Separated Value) format. This is the format Blackboard uses to download your Grade Center. Files saved in .csv formats can be opened by either Excel or Calc, however, only the data will be accessible -- formulas are not saved in a .csv format.

**If spreadsheets do not need to be edited or changed, save them as .pdf files for your students.**

## Presentations

Presentations are often used to convey a message using graphic images and text. Some presentations may include video and audio. Most presentations are created using Microsoft PowerPoint. OpenOffice also has a presentation application, Impress.

PowerPoint 2007+	pptx
PowerPoint 97 - 2003	ppt
OpenOffice Impress	odp

**If your presentation does not contain animation or transitions or it is something students may want to print to use for review, save it as a .pdf file for uploading to Blackboard.**

You can also use PowerPoint's print functions to save multiple slides on one sheet to help reduce the amount of paper needed to print a presentation.

## Image Files

The most universally supported file formats on the Web are .gif (Graphics Interchange Format) and .jpg/.jpeg (Joint Photographic Experts Group). These are the smallest file sizes and provide good clarity for viewing online and printing on standard printers. Either file type can be inserted into documents or presentations easily.

- Use a .gif file for graphics that have few colors, graphics that contain text or type, or graphics that have large areas of a single color.
- Use a .jpg file for graphics that have many colors and lots of fine detail, such as photos.

**Microsoft Office products are installed on each computer at ICC. Campus computers also have copies of OpenOffice products which are compatible with Microsoft products and are free to download. Anyone can download OpenOffice software at <http://download.openoffice.org/>**

## Media Files

Both audio and video files can be used within Blackboard. Media files often require specific plug-ins or players to work properly.

### Blackboard Recommends

<b>Windows Movie File</b> - video format that will always open on a Windows computer -- easiest to insert into a PowerPoint presentation	wmv
<b>Audio Video Interleave</b> - video format that can play on Windows computers -- very large file size	Avi
<b>QuickTime Movie File</b> -- video format that requires QuickTime player	.mov, .qt
<b>Shockwave Flash</b> -- animation, interactive applications -- not supported on iDevices	.swf
<b>Flash Video</b> - video format used for most online video (like YouTube)	.flv
<b>MPEG-4</b> - video format used by many mobile devices (like phone)	.mp4
<b>MPEG-1</b> - audio format used for online audio files & podcasting -- most popular audio file format	.mp3
<b>Windows Media Audio</b> - audio format that plays only in Windows Media Player	.wma

### Blackboard Recommends

## Size Matters

Your ICC Blackboard course site is limited to **500MB**. File sizes have a tremendous impact on your Blackboard courses for all users. It's a good idea to optimize all files you upload into your courses to obtain the smallest file sizes possible, at the best quality possible. Also, when archive zip files become too large (over 500 MB) they can not be recovered if needed.

Small files open faster which is particularly important for users on slower connections. Some network connections will timeout before a document is transferred if the process takes too long. Additionally, computer screens only display 100 dots per inch resolution so using images with higher resolutions is a waste of time and space!

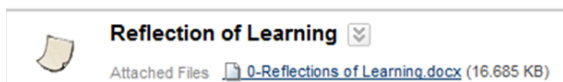
## What Makes Files So Large?

Including numerous large images in a document or presentation will dramatically increase the size of the file. Media files also can be very large. PowerPoint - presentations with high resolution graphics or audio narration use more space.

Both PowerPoint and Word provide methods for compressing pictures and graphics to reduce the size of the file. Simply highlight one of the pictures in the document or presentation and click on **Compress Picture** in the Picture Format menu. You can choose to compress all of the pictures in the file at one time to save space.

## Determining the size of a file in Blackboard

If you upload files to Blackboard, you can easily determine the size of the file in your course view. A file that is uploaded to Blackboard will show the size of the file in kilobytes, megabytes, or gigabytes. In the example below, the file is 1.66 megabytes, or 16.69 KB.



## Managing Course Size

It is up to you to manage the size of your course site (although you may get some reminders from the TLC). Here are things you can do --

- Remove all materials you are not using from the course. Save them to a flash drive or your network drive in case you want to use them again later.
- Link from your site to as much content as possible. This will prevent files from being duplicated on the Blackboard server and your content will remain updated when the content you are linked to is modified.
- Compress the pictures in all presentations and documents before you upload them to Blackboard.
- If you are using PowerPoint presentations with audio or video files embedded, contact the Teaching and Learning Center to see if your materials should be moved to a streaming server and linked to your course.
- If your students are creating projects that are large in size, contact the Teaching and Learning Center to discuss options for saving files and linking the content into Blackboard.
- Archive and have the Teaching and Learning Center remove any course sites you are not planning to use for the next year.
- Save all static files (those which can not be edited) as .pdf files to upload to Blackboard. This includes your syllabus, course policies and lecture notes.

## Alternative File Storage Locations


The maximum file size for uploading to Blackboard is 50MB but there are alternatives for storing large files so they can be accessed by students through Blackboard.

Symposium Live is a streaming server. It is designed to house video clips and narrated PowerPoint presentations so they can be linked to Blackboard.

DivShare is an audio storage server for keeping large audio files on the Web for easy access from Blackboard.

Flickr is an online photo storage service that allows you to create an account and upload your own photos which can then be linked to Blackboard courses.

SlideShare and AuthorsSTREAM are online storage options for narrated PowerPoint presentations.



**The staff in the Teaching and Learning Center is available to help you become more familiar with online storage options for large, media-intensive files. Contact them at 309-694-8908 or [tlc@icc.edu](mailto:tlc@icc.edu) to talk about the best fit for your needs.**

