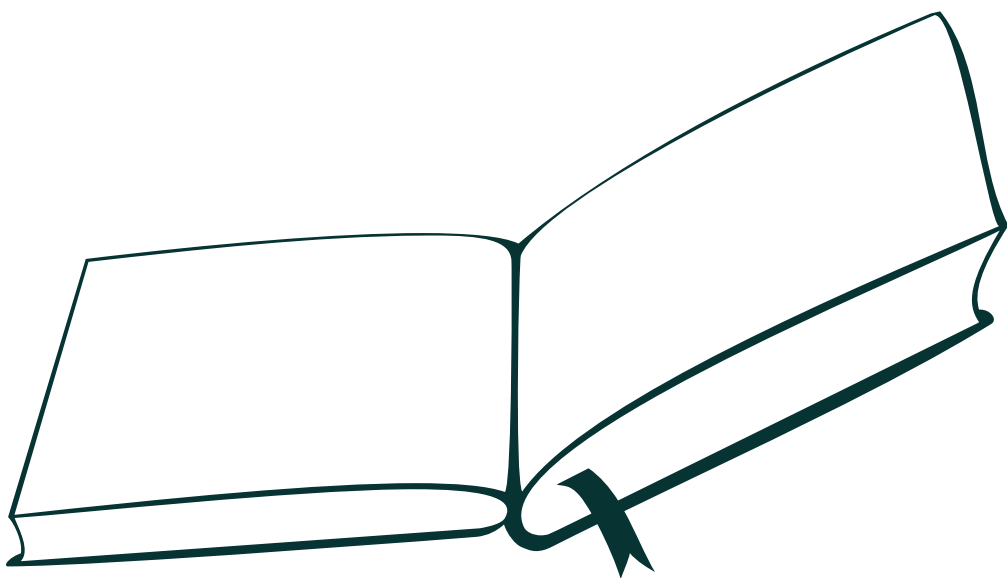# THE ESPRESSO BOOK MACHINE AT MICHIGAN STATE UNIVERSITY LIBRARIES

SUBMISSION GUIDELINES AND BEST PRACTICES

PUBLISH INSTANTLY AT THE MSU LIBRARIES

THE ESPRESSO BOOK MACHINE
AT
MICHIGAN STATE UNIVERSITY

Produced and compiled by Kyle Pressley
Edited by Ruth Ann Jones
and
Erica Ervin

MSU Main Library
100 Main Library
East Lansing, MI 48824

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Printed on the EBM@MSU

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INTRO TO TECHNICAL GUIDELINES

To print your book, you will need to submit two files for in PDF form. One file will contain the bookblock (the interior pages) and one will contain the cover of your book.

These files will need to be print-ready, meaning that all of your writing, editing, and formatting is finished. Your book will be printed exactly as it appears in your PDF. Only the cover is printed in color. The interior bookblock is printed in black and white only.

Please read and follow these guidelines carefully as this will ensure a seamless and timely print.

TECHNICAL GUIDELINES

THE BOOKBLOCK

The bookblock is your content, the interior pages of your book. This is where you tell your story, arrange your recipes, combine all of your poetry into a collection — it can be anything you want it to be. All of the components — pages full of text and images *and* blank pages — will be found in this single PDF.

Let's get a few definitions out of the way before you dive in:

Page count - The length of your book: this means each individual page of your PDF file, blank pages included.

Margin - The distance of blank space from the edge of the page to the edge of your content.

Bleed - The "cushion" area past the edges of your pages that content (images or graphics) can extend to. This is used to force graphics to extend to the very edge of the page.

Front matter - Anything included in your bookblock that comes before your content. This includes a title page, copyright page, acknowledgments, any blank pages, etc.

Core matter - The chunk of book from where page one of your content begins until the last numbered page ends.

Back matter - Anything included in the bookblock following your core matter. This can include the afterward, about the authors, bibliography, etc.

Trim size - The final size of your book (width x height).

Content - The words and graphics in your book.

Now that some technical definitions are laid out for you, let's put them to use.

PHYSICAL REQUIREMENTS

The bookblock must adhear to these requirements to print properly. The block prints double sided on 8.5" x 11" paper — one PDF page per one side of paper.
*If you would like your book to print single sided, you will have to insert blank PDF pages between each content-filled page to create this effect.

The bookblock can only be printed in black and white.

PAGE LENGTH
Minimum: 40 pages
Maximum: 800 pages

To determine your page count, open your PDF document. The tool bar of your program will tell you the count. Each page (both including blank pages) counts toward this number.

TRIM SIZE

There is a relationship between trim size and page length. The way the book prints in the EBM causes your maximum trim size to decrease with an increase number of pages. The loss in size is minimal and won't be a factor in most book printings, only books that have been formatted at larger page sizes will have to adjust.

Minimum trim size: 4.5" x 5"
Maximum trim size: 8" x 10.5"

Page Length	Max Trim (width x height)
Up to 300	8" x 10.5"
Up to 400	7.875" x 10.5"
Up to 500	7.75" x 10.5"
Up to 600	7.6" x 10.5"
Up to 700	7.5" x 10.5"
Up to 800	7.4" x 10.5

When formatting your pages for trim size, do not include crop or registration marks — the machine knows where to trim the book based on the files you've submitted.

Books don't have to be any of the specific sizes listed, they can be any size between the minimum and maximum sizes.

The following pages detail how to set these sizes in your original document.

## SETTING UP BOOK BLOCK SIZE IN RELATION TO YOUR PDF DOCUMENT

The page size specified in your PDF file should be the same as the intended trim size for your final book.

It is best to create your original document at this size — when typing your book or arranging your pages, set the document size to your intended trim size.

To do this, follow these steps:

MICROSOFT WORD:

Click File, then Page Setup, and alter the page size to match your desired trim size. This screen shot shows Word 2010 — refer to the help section of your specific Word version.
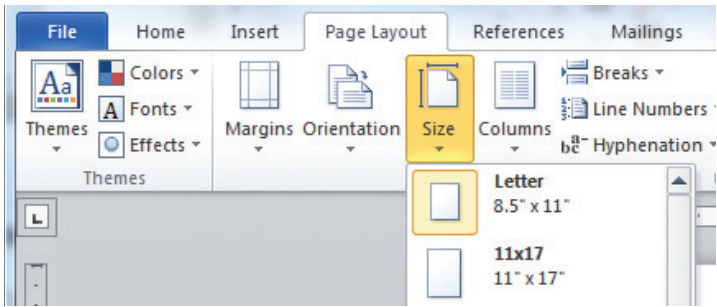
THE COVER

The cover has a few limitations to keep in mind as you consider and execute your design.

» Nothing can print on the interior of the cover — the inkjet used to print the over does not support duplex printing.
» Save your cover design for last. The length of your book affects what the final trim size can be. After you've determined the final page count of your book, you'll be able to calculate the spine size and the maximum trim size.

CALCULATING YOUR SPINE WIDTH

The width of your book's spine depends on the length of your book and the thickness of the paper used to print your bookblock.

In order to determine this size, use this simple formula.

Page Count ÷ Pages per inch = Spine width

Pages per inch (or PPI) is a constant number determined by the EBM staff. Our standard paper has a PPI of 482.

So, as an example, a book with a length of 250 pages would have a width of:

250 pages ÷ 482 PPI = .5187 inches

Please use as many numbers after the decimal point as possible. This will make the alignment of your cover much more precise.

SETTING UP YOUR COVER DOCUMENT

We offer a variety of cover templates for you convenience. They are available for a fee that includes formatting and altering them to specifically fit your book.

The cover document should follow these requirements:
- » Centered horizontally and vertically on the 11″ x 17″ document
- » No crop or registration marks
- » A bleed of .25″ to .5″ on all sides of the cover image
- » We suggest using InDesign to set up the document, there are books in the Reserves section of the Main Library to assist you with this.

The document must be formatted like the diagram below with the back cover on the left, the spine in the center, the front cover on the right, and all of them placed to allow for proper binding and trimming.

17″

11″

BACK   SPINE   FRONT
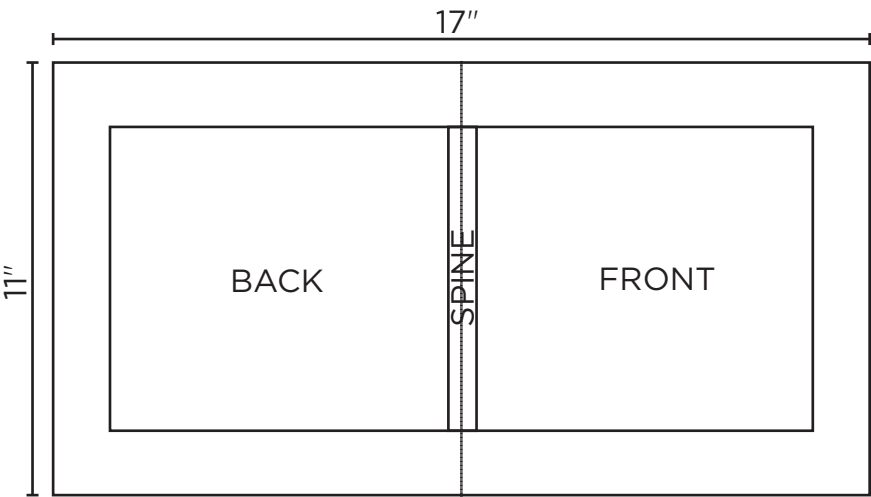
IMAGES

If you are scanning images to place in your cover, make sure they are at a resolution of at least 300dpi (dots per inch). This will ensure they print in a clean and crisp manner.

Many scanners allow higher resolution scans (up to 600dpi), but this will greatly increase your file size. Usually the higher resolution is imperceptible in printing. For this reason we recommend scanning at 300dpi.

COLOR SETTINGS

While we cannot guarantee an exact match between the color you see on your screen and the color that prints on the EBM, we can take a few steps to ensure it is as close as possible.

You'll be able to view your cover on the staff's computer screen to ensure its color accuracy - the monitor used by the staff is set up to be very close in color quality and saturation to what is printed from the EBM's cover printer.

If you are using InDesign, please design your cover in CYMK mode. This will ensure the most accurate reproduction when printing your color. Other programs used to create cover images do not require this setting to be checked.

Books to assist you with this are located in the Reserves section of the Main Library.

COVER TEMPLATES

If you are unfamiliar with using desktop publishing software such as InDesign, MS Publisher, or QuarkXPress, we have a number of cover templates available to use for a nominal fee.

If you would like to use one the the templates we provide, please provide us with a few pieces of information:

- » Title
- » Subtitle (if you have one)
- » Author Name (as you would like it to appear on the cover)
- » Page count (as defined earlier in this publication) - including blank pages
- » A short summary that you would like to have printed on the back cover (optional)
- » Author biography and picture (optional)
- » An image scanned at at least 300dpi to place as the background in palce of the stock image used. Copyright verification must be made in advance with EBM staff in order to use a custom graphic/image.
- » Any other information you would like to have included on the cover

FILE SUBMISSION

PDF DOCUMENT FORMATTING

When submitting your files for print, please format the PDF documents according to the following guidelines.

Using Microsoft Word to create your PDF documents requires a few steps. There are books located in the Reserves section of the Main Library to assist you with this process.

In order to create a PDF on your computer that is compatible with the EBM, you must have Adobe Reader installed. It is availble as a free download. Visit:
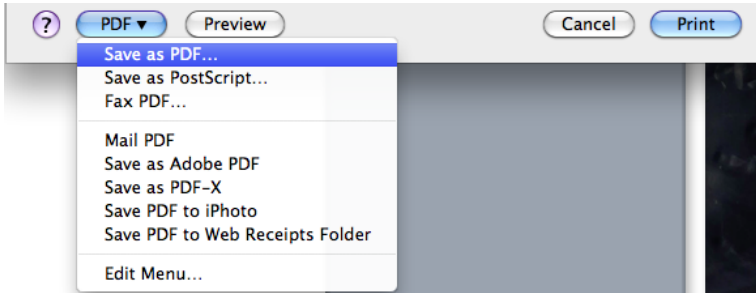
> http://www.adobe.com/products/reader.html

You will need to save the PDF with the preset of "High Quality Print." This option is only available when you follow the "Print to PDF" option in Microsoft Word.
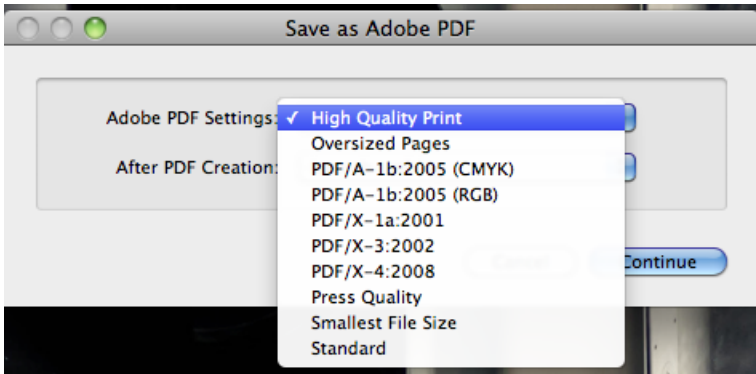
PRINTING TO PDF (MAC)

1. Click File, then Print.
2. On the bottom left of the Print window is a PDF button. Click this to open a drop down menu.
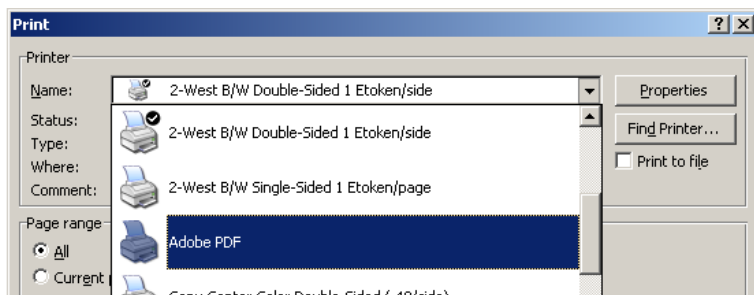

3. Click "Save as Adobe PDF"
4. Select "High Quality Print" from the list of available presets.

5. Click Continue
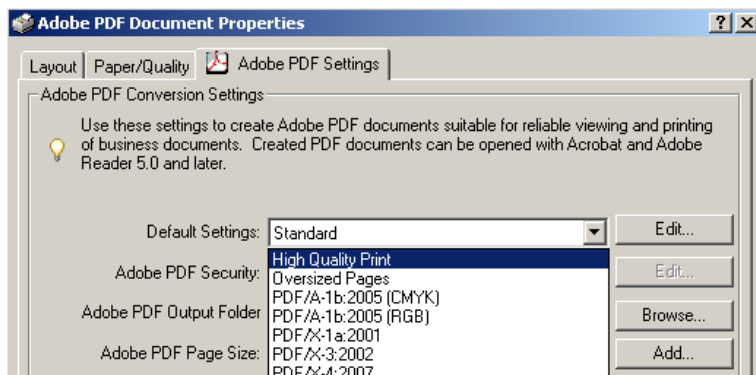6. Continue through the rest of the saving options as you would when saving any other file.
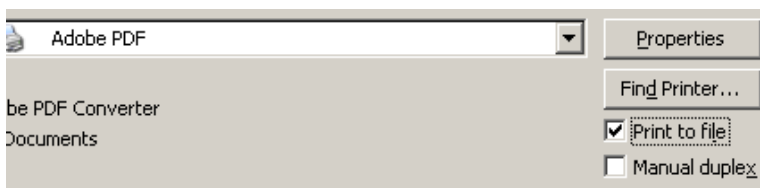
PRINTING TO PDF (WINDOWS)

1. Click File, then Print.
2. From the list of available printers select Adobe PDF.

3. Click Properties
4. Select "High Quality Print" from the list of available presets.

5. Click OK
6. Make sure the "Prit to File" box is selected on the Print window, then click print.

DID MY PDF EXPORT CORRECTLY?

We suggest opening your PDF documents on another computer to ensure they've exported correctly.

Check for font accuracy, color accuracy, and graphical aspects. If these components, or any others, of your files seem to appear incorrect on another machine, it is very likely the document will print incorrectly on the EBM.

If the fonts are not embedded or graphics appear to be incorrect, return to the PDF exportation settings to ensure all fonts are embedded and the proper PDF standard has been selected (High Quality Print). If you are unsure of how to do this, please mention this when submitting your files for basic set-up.

ELECTRONIC FILE SUBMISSION

Your files must be submitted in PDF form either over the internet or in person. These procedures will be discussed in your initial consultation.

TIPS AND TRICKS

BOOK STANDARDS

The settings in the section of the book are all optional, but when used consistently throughout your book make the reader more comfortable and familiar with each page.

TRIM SIZES

BOOK TRIM SIZES

Most books have trim sizes of somewhere in between 5" x 7" and 6" x 9". The EBM can print anything between 4.5" x 5" and 8" x 10.5", though. You may choose any size you desire between these two extremes.

Most fiction books fall in the smaller ranges; most non-fiction books (conference proceedings, course packs, etc.) fall in the larger range.

FONTS

FONTS TYPES AND FAMILIES

Utilizing a variety of fonts can give your book character and set it apart from others. Try limiting your font choices to two or three styles. Any more than this and your reader may become confused.

There are two basic font categories: serif and sans serif.

SERIF
Serif fonts are much easier to read for long periods of time. The font family is distinguished by the "caps" at the ends of each letter's stroke.

Examples of serif fonts include:

Times New Roman
Californian
Garamond
Palatino
Century

SANS SERIF
Sans serif fonts can look much more clean and more modern when used in conjunction with serif fonts. This family is characterized by its lack of "caps" at the ends of each stroke. They are much harder to read over extended periods of time.

Examples of sans serif fonts include:

Lucinda Sans
Verdana

FONT SIZE

Most word processesing programs meaure font size in "points."
To get an idea of what a "point" or "pt" is, a 72pt font is 1 inch tall.

Books tends to have a font size of anywhere in between 10pt and
12 pt. These fonts are easy to read - but keep your audience in
mind. If you think your audience may prefer a larger size, use it. If
they want as much information on the page as possible (without
caring about a smaller typeface), you could even decrease the
size to a 9pt font.

The smaller the font, the harder to read. The larger the font, the
more uncomfortable it may be to read. For example, the font you
are reading right now is 12pt.

We suggest running a test page from your book to test for
readability before submitting your finalized file.

DON'T WYSIWYG!

WHAT YOU SEE IS WHAT YOU GET (WYSIWYG)

Using "What You See Is What You Get" tools could be detrimental to your book creation process. Follow a few basic rules to cut down on editing and formatting time - this will also ensure that any edits you may want to make later down the line will not require a complete overhaul of your document.

» Do not use the space bar to align text; use the tab key to create indentations.
» Centering text using the centering tool will make text editing much easier and uniform from page to page.
» Along with this centering tool comes a series of other alignment options (right-align, center, left-align, and justify). Use these as as necessary rather than manually aligning each section.
» Creating a new page by pressing the "enter" key many times will make later edits very difficult (especially if you wish to change your font or trim sizes). Use the Insert Page Break tool to start a new page.
» Dragging and dropping images (or cutting and pasting) into your document will cause a loss of quality and often a corruption of the file. Use the Insert Picture tool to accomplish this task.
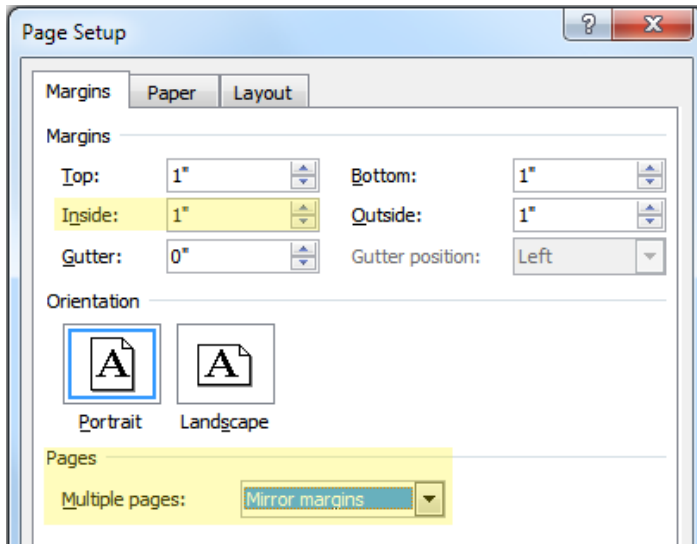
MARGINS

KEEPING YOUR CONTENT ON THE PAGE

Margins are the distance from the edge of the page to where your content starts.

The EBM has a wide range of possible printing margins, but there are a few suggested minimums that can make your book easier to read.

At least a margin or .75" on the top, bottom, left, and right of the pages is recommended for pages to print properly.

But, you may want to consider increasing the margins that will be facing the spine of your book. This will keep text out of the crevass created by binding. For example, this book has an interior margin of 1", compared to the outer margin of .75". The top margin (the distance to the subheader of this page, "Keeping your content...") is .75 inches. The bottom margin is held at a constant .75 inches as well, though the content of the page doesn't reach it.

Microsoft Word has a feature that will accomplish this task for you. Use the setting for "Mirrored Margins."

The setting is located under the Page Setup menu.
Adjsut your Inside Margins to be a little larger than the rest.

⟩ TABS AND LINE SPACING

TABS

Generally, tabs (the key used to indent paragraphs) are set to anywhere between .25" and .5". Set this distance under your Paragraph settings to ensure that your intentations are uniform throughout your book.

LINE SPACING

You have some freedom to roam here. Books have a standard setting between 1.15 and 1.25. Double spaced is usually too large to read comfortably and single spaced too cramped. Use your best judgement, or a few test pages printed on another printer (the EBM is unable to print test pages individually) to find the spacing necessary for your purposes.

Use the settings under the Paragraph settings panel to adjust your line spacing.

BOOK SECTIONS

This section deals with the formatting of your font, core, and back matter.

Some sections of books require different formatting. Ideally, your core matter will be consistent throughout, your front and back matters will formatted in similar ways, and they will all be included in one fluid document.

These settings do not have to be uniform from page to page.

FRONT MATTER

YOUR FRONT MATTER

Your front matter contains all pages before your book's core matter (the numbered pages full of content). This generally includes your title page(s), copyright page, dedications, forwards, etc.

This section does not necessarily require page numbers. Therefore, it may be easier to create this section in another document; that is, a separate document (with the same specifications such as page size, fonts, formatting, etc.) with your front matter will be created and turned into a PDF to later be merged with the rest of the sections. Page numbers are difficult to manually format in MS Word and programs such as InDesign. Creating multiple documents will easily work around this problem.

The EBM staff is available help with file merging during your initial consultation fee. Please see pricing guide to determine which level of assistance you will require as this will take varied amounts of time depending on the original formatting.

ORDER OF PAGES

Most books follow a general rule when it comes to front matter.

One blank sheet of paper (two blank PDF pages), followed by a title page with the copyright information on the reverse side of that page. Then a table of contents. Follow these pages with any dedications, forwards, etc. then finally your core matter.

CORE MATTER

YOUR CORE MATTER

Once again, the core matter is your book's content — the pages full of your text and content of your book.

PAGE NUMBERS

Generally, these pages are numbered. You can use the numbering feature of MS Word to easily format them. It is best to keep them either centered on the page or aligned to the outside margin.

Pick a font for your page numbers that either matches your bookblock or one that compliments it. Typically, book numbers are the same font size (or just a bit smaller) as your content's size.

Page 1 is usually the first page of content — it is the first page to the right of the spine facing you.
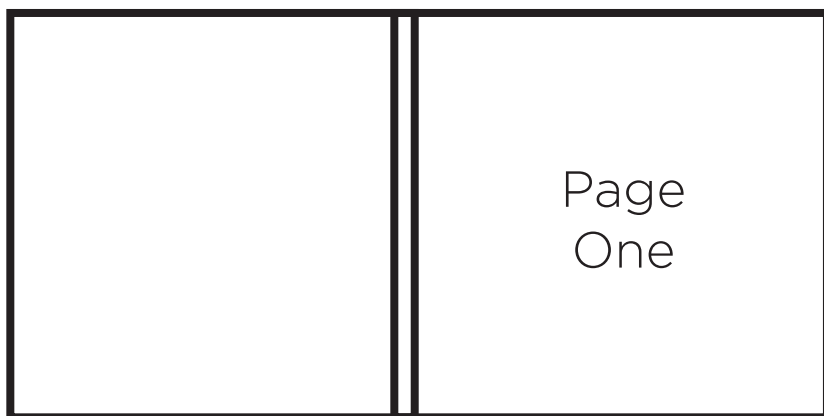
Page
One

CHAPTERS AND SECTIONS

You may wish to treat the beginning of your chapters or sections with different formatting to set them apart from the rest of the text.

Consider dropping the first line of each chapter 1/3 of the way down the page, or implement a drop cap for the first letter of the chapter's content. A drop cap is creative way to start a paragraph that is demostrated on the follow page; you set how many lines tall you would like the first letter of the paragraph to be.

This will signify to the ready that this is clearly a new chapter/section, easing the reading experience even further.

Often, the title of the chapter will be specially formatted with a different font, weight, and size. The following page is an example of a chapter page with the following spefications.

Page size	6" x 9"
Font	Century
Font size	12pt
Tabs	0"
Margins	Inside: 1" Top and Bottom: .75" Outside: .75"
Line spacing	1.15
Page numbers	11pt Century
Title	18pt Gotham
Drop Cap	3 lines
Text alignment	Justified

LOREM IMSUM

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer quis sagittis nulla. Nunc vel massa sit amet orci vehicula vulputate. Quisque a aliquam massa. Sed ut commodo neque. Cras quis lorem elit, ut rhoncus eros. Nulla magna quam, vehicula sit amet elementum a, fringilla varius elit. Praesent hendrerit, risus luctus feugiat suscipit, tortor lectus tempor libero, non volutpat sem sapien et lectus. Integer congue, metus tempus sagittis tempor, turpis mauris dignissim dui, at lacinia erat lectus ut mauris. Duis massa libero, ornare sit amet rhoncus eget, pharetra nec lacus. Vivamus in orci vitae enim pharetra convallis.

Duis vestibulum ultrices iaculis. Aenean est ante, molestie ac ultrices eu, varius ac augue. Phasellus fermentum ultricies bibendum. Duis rutrum urna a dolor lacinia rhoncus. Nunc malesuada ultrices egestas. Morbi a odio eget diam interdum porttitor. Etiam sed eros vel nisl dapibus mollis sit amet consequat justo. Sed tellus mi, fermentum rutrum lobortis id, vulputate in turpis. Nullam egestas eleifend pulvinar. Quisque gravida erat sit amet est fermentum fermentum. Sed consectetur placerat leo eu dapibus. Curabitur non nulla

HEADERS AND FOOTERS

You can place headers or footers on your pages to signify the chapter title, author, etc. Often, the left page will state the book title in the header and the right page will state the chapter title.

The next page has attributes following these guidelines:

Page size	6" x 9"
Font	Century
Font size	12pt
Tabs	0"
Margins	Inside: 1" Top and Bottom: .75" Outside: .75"
Line spacing	1.15
Page numbers	11pt Century
Header	10pt Garamond, Italic
Header alignment	Center
Text alignment	Justified

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer quis sagittis nulla. Nunc vel massa sit amet orci vehicula vulputate. Quisque a aliquam massa. Sed ut commodo neque. Cras quis lorem elit, ut rhoncus eros. Nulla magna quam, vehicula sit amet elementum a, fringilla varius elit. Praesent hendrerit, risus luctus feugiat suscipit, tortor lectus tempor libero, non volutpat sem sapien et lectus. Integer congue, metus tempus sagittis tempor, turpis mauris dignissim dui, at lacinia erat lectus ut mauris. Duis massa libero, ornare sit amet rhoncus eget, pharetra nec lacus. Vivamus in orci vitae enim pharetra convallis.

Duis vestibulum ultrices iaculis. Aenean est ante, molestie ac ultrices eu, varius ac augue. Phasellus fermentum ultricies bibendum. Duis rutrum urna a dolor lacinia rhoncus. Nunc malesuada ultrices egestas. Morbi a odio eget diam interdum porttitor. Etiam sed eros vel nisl dapibus mollis sit amet consequat justo. Sed tellus mi, fermentum rutrum lobortis id, vulputate in turpis. Nullam egestas eleifend pulvinar. Quisque gravida erat sit amet est fermentum fermentum. Sed consectetur placerat leo eu dapibus. Curabitur non nulla eu risus luctus rhoncus. Suspendisse potenti. Nullam nec sem a augue adipiscing varius a nec ligula. Sed ut ipsum a odio molestie tempor. Quisque feugiat blandit blandit. Nullam tortor tellus, pretium ut interdum ut, viverra eget sem.

Ut vitae mauris lacus, feugiat vehicula odio. Duis

BACK MATTER

YOUR BACK MATTER

The back matter of your book is comprised of anything that comes after your core matter. This includes an epilogue, afterword, bibliography, indexes, glossary, etc.

It is suggested that you format the back matter similarly to how you formatted the front matter. This will, again, ensure a consistent and easy read.

FREQUENTLY ASKED QUESTIONS

What is the Espresso Book Machine at Michigan State University Libraries?

The Espresso Book Machine (or EBM) doesn't make coffee – the EBM is a completely self-contained book publishing machine. The EBM can print anything from your family cook book to a novel you've written or have selected from our catalogue. The machine will print, bind, and trim a book within minutes – it will do this for virtually any book.

Where is the EBM located?

The EBM is located in the Copy Center in the Main Library. The Copy Center is on the second floor of the west wing.

How does it operate? What is the basic process?

The EBM first prints your pages on a high speed copier. Then, pages (called the book block) enter the Espresso Book Machine and are prepared for binding. While the book block is printing, a full color cover is printed from an inkjet printer and is automatically fed into the EBM. The book is then formed by gluing the book block to the cover page – this forms the spine and the cover is clamped against the spine and pages to create a perfect-bound book. Then, in one motion, the newly joined book block and cover page are trimmed to your exact specifications. The book then travels to the pick-up slot for retrieval.

Can I see the EBM in action?

Yes! The machine runs during normal Copy Center hours and is fully accessible to see up close.

Can I receive help with formatting my book block and/or cover?

Yes! There is a dedicated staff position for the EBM that will be available during posted hours to help you with any EBM needs. There are fees for certain services, refer to our pricing guides to see these fees.

How long will it take to print my book?

Your book will print in less than ten minutes if the files are fully ready for print. There are various factors in each case, so refer to the times provided by the EBM staff, they will provide estimates for each case.
Books ordered online from the catalog will be available the next business day. If orders are placed on the weekend, allow for two business days for processing and printing.

Are there templates available for formatting the cover?

Yes. There are a few different options for cover templates. They are available for a fee. Please see the pricing guide for this information.

Where can I learn more technical information about the machine?

You can either speak with the EBM staff or look on the manufacturer's website. On Demand Books developed the EBM and Xerox manufactures the high-speed copy machine (the model is a Xerox 4112) used to print the book block. The inkjet printer is made by Epson (the model is Epson Stylus R1900).

What types of books can the EBM print?

The EBM can print:
1. Books available in the On Demand Books catalog. This is available to search at www.ondemandbooks.com
2. Books out of copyright and in the public domain available through many sources including Google Books, Hathi Trust, and other outlets.
3. Self-published books that are custom formatted, written, and designed by the author.

TAKE SOME NOTES