Bibliography and LaTeX Practice Assignment 3

Due: Week 5 Wednesday by 11:55pm (via Overleaf invite) **Setup:**

- Back up the work that you've done so far by going to `menu` and download `source`.

- Using the "folder" icon, create a new folder called `assignment3` in the same project `MATH2794W YourName` (where you've kept all the files from your past assignments).

  Create a new file called `intro3.tex` in this folder and set it as your main file. You may want to copy and paste the files from LaTeX Practice Assignment 2 as a template: intro2.tex, Bib.bib, and fig1.pdf.

- Create a new blank `.bib` file in this folder. You can call it `Bib.bib` or something else.

- Change the author's name to your name and the date to the due date.

- Your assignment is described at the end (Sec. 2 and 3) of this handout.

You will follow a demo on BibTeX, MathSciNet, etc at the start of class.
If you miss class, please follow the written instructions below. You can watch a video bibliography_using_bibtex or look up other instructions.

1 Creating BibTeX entries

Manually typing a BibTeX entry

a. We will create a BibTeX entry for the Calculus book by Stewart. Open a search engine and search for "how to cite Stewart Single Variable Calculus Early Transcendentals 8th edition." You can try some of the links that show up, for example, the link of the publisher, CENGAGE LEARNING. It would tell you the title, the edition (8th), and the author (Stewart, James), and the published year (2016).

b. With the `Bib.bib` file from LaTeX Practice Assignment 2 as a guide, create an book entry for Stewart. The key of the entry could be `Ste16`, `Stewart`, `Calculus` or another name you prefer. For consistency, you should pick a convention and stick to it. For example, my convention is to write the first three letters of the author's first surname (if the reference is a single-author publication) or the last-name initials of the authors (if there are two or more authors) followed the last two digits of the year of publication.

c. To check that this works, please go to your `intro3.tex` file and type a sentence citing this reference (assuming you picked the key `Ste16` for your BibTeX entry):

  It is well-known that e^x is its own derivative, for example, see `\cite{Ste16}`.

  Recompile and make sure no error or warning appears.

d. Typing

  `\cite[Section 11.10, Exercise 84]{Ste16}`

  would produce [Ste16, Section 11.10, Exercise 84] in your PDF file.

Using MathSciNet to generate a BibTeX entry

a. Go to UConn Library Math and Stat Subject Guide: https://guides.lib.uconn.edu/math. You can use this resource to find books and articles for your big paper.

b. Find the list of "Key Databases" and click on MathSciNet, which you have access to with your UConn NetID.

c. As an example, we will use mathSciNet to generate an entry for a Calculus book written by Spivak.

  - On the author's field, type "Spivak" or "Spivak, M." and on the title's field, type "Calculus".
  - After you've found the correct publication, click on it to see a short review of this publication.
  - On the drop-down menu, select "BibTeX." This should take you to a page containing a BibTeX entry of the book in question: https://mathscinet.ams.org/mathscinet/search/publications.html?fmt=bibtex&pg1=MR&s1=209411.

- Copy this entry and paste it to your `.bib` file. Replace the key of the entry from `MR0209411` to another name that you can easily remember, following your convention. If you follow my convention you would use `Spi65` as the key.

d. Check that you didn't have a typo by citing this reference in `intro3.tex`.

Using Google Scholar and other search engines to generate a BibTeX entry

a. Go to scholar.google.com

b. Search for an article, for example "Cluster algebra I: Foundations by Fomin and Zelevinsky"

c. You would be able to see how many times an article has been cited in other publications.

d. Click on the symbol which looks like a quotation mark.

e. Click on the link to "BibTeX"

f. Copy this entry, and paste it into your .bib file.

g. Change the key from `fomin2002cluster` to something that is easier for you to remember.

Creating a BibTeX entry for an online article

Follow the example from the previous assignment to cite the wikipedia article that you need.

2 Assignment: Typesetting and creating bibliography

Option A: Typesetting talk notes

a. Write "talk notes" in the form a 2-to-4-page paper. Plagiarizing from another source is allowed. Please check with me first before starting the assignment.

b. Include at least one table and five instances where you use the command \begin{align*} and \end{align*} or \begin{equation} and \end{equation}.

c. Include at least four citations - use the references suggested on the course website under "Talk resources". In order for the references to show up, you would need to include them in the body of .tex document using the `\cite` command.

Option B: Choose your own paper

a. Find a mathematics, statistics, or computer science text or article (on a topic that interests you) that was not written in LATEX, and type up part of the text or article (2-4 pages). Please check with me first before starting the assignment.

b. Include at least one table and five instances where you use the command \begin{align*} and \end{align*} or \begin{equation} and \end{equation}.

c. Include at least four citations - use the references suggested on the course website under "Talk resources". In order for the references to show up, you would need to include them in the body of .tex document using the `\cite` command.

Option C: Typesetting a Calculus 2 paper

a. If you choose this option, you do not need to check with me beforehand.

Either paraphrase or simply copy word-by-word the paper " sample03.pdf " which discusses an example which you might or might not have seen in Calculus 2.

b. To monitor each change you make, click "Recompile" and view the PDF in "Full Screen" mode. When you are done, the PDF output that gets created should closely match the PDF file.

c. Minor differences such as sentence placements and the location of the table are fine. In addition, if you notice what you believe to be a typographic or math error, you may go ahead and fix it. You also have the freedom to add extra sentences that you think would improve the clarify of the paper.

3 Assignment: Labeling numbered environments and writing the abstract

- Make sure to use `\label`, `\ref`, and `\cite` whenever you reference a numbered environment.

- Read the abstracts and skim through the sample papers given in egunawan.github.io/writing/schedule

- Write your own abstract (2-4 sentences) which concisely summarizes the paper that you chose to typeset.

  Note: Your abstract will be graded based on quality. If you choose Option A, the rest of the assignment is only graded on your LATEXskills (and not on your writing).