

Tips and Hints on How to Successfully Complete Your Comp-8100 (60-510) report (FALL 2023)

A. Course Objective: learning how to conduct research.

What is research? – an organized way of finding information about a defined problem or field.

Thus, starting point is to define a problem in terms of a Comp-8100 (60-510) topic, which is expected to be a broad topic in the area of student thesis.

Areas of research specialization in Computer Science, also as summarized in the ACM/IEEE/AAAI Computer Science Curricula Version Beta March 2023 (ACM et al., 2003) include: Databases, Software Engineering, Networks, Computer Hardware, Operating Systems, Graphics, Computer Vision, Artificial Intelligence, Computer theory, Programming Languages and Compilers, High Performance Computing, Multimedia systems, Game theory and development, etc. A lot of sub areas exist within these research areas, for example, data warehousing and mining are part of database research. The above are example core subject areas you will find core undergraduate courses in Computer Science in. There are a lot of application areas such as E-Commerce, health informatics, education systems, social network analysis, etc.

Question 1: What is your research area?

Ways to define a Comp-8100 (60-510) topic are;

- given by your thesis supervisor
- proposed by you to your thesis supervisor (you can generally do this by reading recent research papers and work by your supervisor and their students. Also, reading recent research papers by world renowned researchers in that field of research). Some recent Comp-8100 topics are:

Obstacle Detection Using Computer Vision

Molecular Distance Geometry Problem

Mining High Sequential Utility Patterns for E-commerce Recommendation

Opinion Maximization and Mining in Social Networks

Question 2: What is your Comp-8100 (60-510) topic?

After obtaining a topic, information need to be **gathered** and **written up**.

B. Media for Gathering Necessary Research Information:

1. Conference proceedings in the research area. Important conferences in many areas of Computer Science can be found through the acm web page (www.acm.org) or through the dblp web site <https://dblp.uni-trier.de/>. Other sources of CS conferences are monthly magazine publications of the acm called, Communications of the acm (CACM) and the one by IEEE computer society called the IEEE spectrum. Both the CACM and the IEEE spectrum are available

at the library. An example Web page for data mining conference listings 2023 with a google search on data mining conferences is:

<http://www.wikicfp.com/cfp/call?conference=data%20mining&page=1>

2. Journals in the research area and field. These can also be obtained through the library online system. Some journal and conference ranking services for checking the quality of the publication forum include the core CS journal ranking: <http://www.core.edu.au/>.
3. Citation index services can be used to check the impact and significance of authors and articles. Some citation index services include: google scholar, scopus, web of science, dblp web site, NEC citeseer web site <http://citeseer.ist.psu.edu/>, acm web site, ieeee web site (www.ieee.org), and web search.
4. Important books in the research area and field.
5. UWindsor Leddy Library and inter-library loan services accessed through www.uwindsor.ca/leddy.
6. Web is always a good resource as it can lead you to authors' web sites where papers may also be obtained.

Your thesis supervisor may help point you to a few important references to begin with.

Question 3: What are 5 to 10 most important articles in your research topic?

You may also begin with one that is very recent (a 2020 to 2023 paper) that is from a well ranked conference proceeding or journal, or from your research supervisor's lab, or from very well-known authors, with high citation counts and high impact, exactly on your topic, etc.

Mark your calendar, we have a library class on Mon., Sept 21, 2020 at 2:30pm online through Zoom to discuss the use of the library and online resources to collect research materials.

Question 4: How far have you gone with your report? How many papers have you collected and read? Which of these sources have you used to collect your research materials?

C. Writing Up the Report

Format of Report: written report should have

1. Text, approximately 5000 words long not including the abstract, diagrams, annotations or bibliography references in double or 1 ½ lined spaced, 12 point font text with not less than 20 relevant papers in the research topic area in the reference list that are cited inside the report. Each new chapter begins on a new page. There is a clear title page, which should include title, student name, email (not student id since it is placed in the library), student supervisor, course instructor, term course is registered in. A sample report may be obtained from me or if time permits, would be scanned and made accessible through brightspace.

2. Abstract, 100 words long (do not write the abstract or the introduction until you have written everything else).
3. Approximately 10 main papers should be used as the basis of the report, with approx 20 in the bibliography.

Correct English sentences are to be used in writing up report. Note that general typing rules require that a blank space be placed after every punctuation (e.g., like comma, period). All citations are part of a sentence and should not be left outside a sentence. All figures in report should have figure labels and captions and are referenced and discussed in the report. Note that the department has license for the grammarly software which would help you edit and correct your report.

Information on how to log on to grammarly
You should have recently received an email asking for you to confirm your account. Please follow the link and set your password as follows:

- * Follow the link in the email from Grammarly
- * Select "Profile" from the left menu
- * Choose Account from the top menu
- * Press the Edit button next to the password.
- * The old password is HjeC8c
- * Enter a new password twice and press Save Changes

For information, follow the Tutorial link in the left menu.

If you have any problems, please let Sanjay (sanjay@uwindsor.ca) know.

Note: Your Grammarly username is your UWinID username followed by @uwindsor.ca.

To log on to grammarly, go to
<https://www.grammarly.com/signin>
username: username@uwindsor.ca
pw:

Report should focus more on the technical content of the topic (that is, how the systems were built) as opposed to the general description of topic (that is, what the systems do).

Report should consist of **abstract, introduction, research survey (early, later and current research), review of research (and ideas for your thesis from survey), conclusions, references.**

Abstract: summarizes the purpose and contributions of survey after defining the problem area. It can also include specific algorithms discussed and any found ideas.

Introduction: Clearly introduce the topic of survey with examples, figures, discussing the application area of topic, defining possible terms and concepts generally used in the algorithms to be surveyed. The outline of the survey is part of the introduction too.

Research Survey: The technical algorithms are reviewed and summarized here in chronological (time) order, starting with early research, then later research and finally, current research. You do not copy down the algorithms from the papers. Instead, you are expected to understand the paper, summarize with a clear example by working through the example applying the steps of the algorithm. This way, you understand better the work, avoid plagiarizing people's work, gain better insight into the techniques and can more easily apply some ideas to develop your own thesis work. Since you have only so much space for the entire report, out of the 20 most important papers that make the core of your report, you can summarize about 8 to 10 most important papers in detail with clear examples and give the rest a more general summary. No one paper should be summarized in more than 2 ½ pages. Some papers, you summarize in 1 page, some in half a page and some can be cited in a few sentences.

How to Collect the information to write up

For each paper read, write a 2 to 3 page (hand written) summary that includes;

1. problem being solved by paper
2. solution (algorithmic solution proposed by paper) with running example.
3. advantages of method
4. limitations of method
5. your opinion of this solution

These details are followed in the points you are expected to submit as parts of annotations for each of the 10 most important papers read so that later you can use these annotations to form your report.

Example of Technical and General Discussions:

Topic: Advances in Word Processing Software

General Discussion (discussing only features of the system, not how it is built):

In the early 1980's, the word processors like Word Perfect 3.0 were command line and could not incorporate figures and pictures. Underlining a block of text with those would require typing "ctrl/U" command at the beginning and end of the block of text. The use of mouse was not prevalent with these systems then. Later word processors were designed with better graphical user interface (GUI) because of more powerful processors, more advanced hardware components. These systems run faster, provided many more functionalities, allow highlighting of blocks of text with mouse, can insert picture, audio and web links.

Technical Discussion (provide features and how they are built (that is, algorithmic steps)):

In the early 1980's, the word processors like Word Perfect 3.0 were command line and could not incorporate figures and pictures. Underlining a block of text with those would require typing "ctrl/U" command at the beginning and end of the block of text. The commands for changing text to upper case, underlining, bolding and others were implemented as C functions that will take as its input parameter, the string of text marked and return the underlined string using the C string conversion operation " ". For example,

The use of mouse was not prevalent with these systems then. Later word processors were designed with better graphical user interface (GUI) because of more powerful processors, more advanced hardware components. These systems run faster, provided many more functionalities, allow highlighting of blocks of text with mouse, can insert picture, audio and web links. These systems implement the support for GUI through, and support for audio and pictures through, For example, given a text file to format, it will apply the following algorithmic steps.

Review of Research: Write your own ideas of survey and problems found unsolved that may lead to your thesis topic with specific contributions.

Concluding Comments: Summary of work surveyed, solutions they provided and work found undone.

References: The final bibliography should include at least 20 references. 10 of these should be identified as the most important papers and should constitute the basis of the main text of the survey. You need to write an annotation for each of the 10 important papers. The annotation should be structured as shown on the next page, with only a few sentences under each heading. Note that past tense is used to describe experiments etc. which the authors conducted, but PRESENT tense is used to describe what the authors say in their paper. **Each annotation must have 8 headings as given in detail in the course outline.**

Rules for Reporting Reference List

1. All references must be listed sorted in alphabetical order of the last name of the first author.
2. Every listed reference needs to have been cited in the written report or it should not be listed, using a specific reference citation method such as APA, ACM, IEEE. It should actually be clickable in pdf where cited to take you to it in the Reference list.
3. Every listed reference should be complete with authors' names, title of paper, year of publication, journal, book or conference proceeding, volume and number for the publication, publishers and in the case of conferences, the place of the conference, page numbers etc. Please, check full papers and reports for complete references.

Reference List and Citation Methods

The three main techniques used in Computer Science for listing references and citing them in report are:

- (1) Latex plain (IEEE) method with sorted references indexed by numbers in square brackets and these indexes are used for citation in the report. Eg.

[10] C.I. Ezeife, K. Barker, Distributed object based design: vertical fragmentation of classes, *Journal of Distributed and Parallel Database Systems*, Kluwer academic Publishers, vol. 6, 4, 1998, pp. 327-360.

[11] C.I. Ezeife, A uniform approach for selecting views and indexes in a data warehouse, in: *Proceedings of the 1997 International Database Engineering and Applications Symposium*, Montreal, Canada, IEEE publication, August 1997, pp. 151-160.

- (2) Latex alpha method with sorted references indexed by a concatenation of the first letter of the last name of all authors and the year of publication. If there is only one author, the first 2 or 3 letters (be consistent with either 2 or 3)(e.g., [Ez01]) of the author is concatenated with the year. If there are more than 4 authors the concatenation of the first four author names is trailed with a + and year (e.g. [CKLM+97]). E.g.,

[EB98] C.I. Ezeife, K. Barker, Distributed object based design: vertical fragmentation of classes, *Journal of Distributed and Parallel Database Systems*, Kluwer academic Publishers, vol. 6, 4, 1998, pp. 327-360.

[Ez97] C.I. Ezeife, A uniform approach for selecting views and indexes in a data warehouse, in: *Proceedings of the 1997 International Database Engineering and Applications Symposium*, Montreal, Canada, IEEE publication, August 1997, pp. 151-160.

3. The APA (American Philosophy Association) technique. This is a more commonly used citation technique in many other publications in other areas of arts and science. It is still used by many CS journals but is not easily supported by CS word processing applications like Latex. The APA method does not provide any index on the reference list. However, it has rigid rules where the last name of each author is listed first, followed by a comma and the authors' initials (not full names). There is a full book on current APA rules, and updated versions exist such as APA 7th edition. The references are cited inside the report in round brackets using the authors' last names only separated with brackets, while the last author is included with an &. The year of publication is also, appended following a bracket to the citation. An example citation of the publications above are (Ezeife & Barker, 1998) and (Ezeife, 1997). With APA 7th edition, sometimes, in the report, the authors may be mentioned outside the bracket as in Ezeife (1997). Also, with APA format, if there are more than 3 authors, the last name of the first author is used with et al. and year of publication in the citation, e.g., Arasu et al. (2003). Some more sample reference listing in APA format are given below.

Ezeife, C.I. (2001). Selecting and materializing horizontally partitioned warehouse views. *Elsevier Journal of Data and Knowledge Engineering*, 36(2), 185-210.

Galharda, H., Florescu, D., Shasha, D., Simon, E., & Saita, C. (2001). Declarative data cleaning: Language, model and algorithms. *Proceedings of the 27th VLDB Conference*, Rome, Italy.

Hernandez, M.A. & Stolfo, S.J. (1995). The merge/purge problem for large databases. *Proceedings of the ACM SIGMOD International Conference on Management of Data* (pp. 127-138).

APA STYLE GUIDELINES (A sample quick summary)

√ **References**

Your references **must** be fully documented and organized strictly in the **APA (American Psychological Association) style**. References should relate only to material cited within the manuscript and be listed in alphabetical order at the **end of each** chapter. Please see the following examples:

One author:

Author, A. A. (1994). *Title of work*. Location/City, State: Publisher.

Two authors:

Author, A. A., & Author, B. B. (1994). *Title of work*. Location/City, State: Publisher.

More than two authors:

Author, A. A., Author, B. B., & Author, C. C. (1994). *Title of work*. Location/City, State: Publisher.

Journal article:

Sawyer, S., & Tapia, A. (2005). The sociotechnical nature of mobile computing work: Evidence from a study of policing in the United States. *International Journal of Technology and Human Interaction*, 1(3), 1-14.

Instance of publication in press:

Junho, S. (in press). Roadmap for e-commerce standardization in Korea. *International Journal of IT Standards and Standardization Research*.

Edited book:

Zhao, F. (Ed.). (2006). *Maximize business profits through e-partnerships*. Hershey, PA: IRM Press.

Chapter in an edited book:

Jaques, P. A., & Viccari, R. M. (2006). Considering students' emotions in computer-mediated learning environments. In Z. Ma (Ed.), *Web-based intelligent e-learning systems: Technologies and applications* (pp. 122-138). Hershey, PA: Information Science Publishing.

Report from a university:

Broadhurst, R. G., & Maller, R. A. (1991). *Sex offending and recidivism* (Tech. Rep. No. 3). Nedlands, Western Australia: University of Western Australia, Crime Research Centre.

Published proceedings:

Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation: Vol. 38. Perspectives on motivation* (pp.

237-288). Lincoln: University of Nebraska Press.

Unpublished doctoral dissertation or master's theses:

Wilfley, D. (1989). *Interpersonal analyses of bulimia: Normal-weight and obese*. Unpublished doctoral dissertation, University of Missouri, Columbia.

Paper presented at ... :

Lanktree, C., & Briere, J. (1991, January). *Early data on the Trauma Symptom Checklist for Children (TSC-C)*. Paper presented at the meeting of the American Professional Society on the Abuse of Children, San Diego, CA.

Web site:

VandenBos, G., Knapp, S., & Doe, J. (2001). Role of reference elements in the selection of resources by psychology undergraduates. *Journal of Bibliographic Research*, 5, 117-123. Retrieved October 13, 2001, from <http://jbr.org/articles.html>

When you use the source in the text, the author's name and year of publication should appear within parenthesis. An example of this is: (Travers, 1995). Please do not include any abbreviations. Please see the following examples:

Example 1: In most organizations, data resources are considered to be a major resource (Brown, 2002; Smith, 2001).

Example 2: Brown (2003) states that the value of data is recognized by most organizations.

The author's name, date of publication, and the **page(s)** on which the quotation appears in the original text should follow direct quotations of another author's work.

Example 1: Brown (2002) states that "the value of data is realized by most organizations" (p. 45).

Example 2: "In most organizations, data resources are considered to be a major organization asset" (Smith, 2003, pp. 35-36) and must be carefully monitored by the senior management.

*For further information, please consult your library or contact: Order Department, American Psychological Association, P.O. Box 92984, Washington, DC 20090-2984 or www.apastyle.org, for a copy of the *Publication Manual of the American Psychological Association – 5th edition for APA style*. You may also find it helpful to consult the following Web sites:*

<http://www.apastyle.org/faqs.html>

<http://www.apastyle.org/previoustips.html>

Comp-8100 (60-510) TENTATIVE SCHEDULE and Weekly Assignments (FALL 2023)

Week	Activity
0 (Sept 7)	Very first week of classes starting on Thursday (no class for Comp-8100 (60-510))
1 (Sept 11)	Think up a survey title. Discuss this with your research supervisor and with Dr. Ezeife. Your survey should be broad enough to include your potential thesis research area. The topic should be narrow enough so that only 100 important recent (last five years) references are relevant. You may need to change the survey title as you begin to identify relevant references. Assignment#1: is due the following Monday and involves submitting student name, supervisor, area of Master's/Doctoral research, and a tentative topic for survey through brightspace.
2 (Sept 18)	Introduction and discussion of use of library. Assignment#2: is due the following Monday and requires students to submit a tentative survey title at this meeting with a list of search terms, papers returned, exactly-on-topic papers, and extra papers found by looking at citations.
3 (Sept 25)	Review of progress on bibliography, intro to Latex, and discussion of annotation format and possible further revision of survey titles. Assignment#3: is due the following Monday: requires students present a list of all exactly-on-topic paper references in the APA (<i>American Psychological Association</i>) Surveys format (see example survey on the course website), 10-20 most-important papers with reasons for choice, and one annotation for at least one exactly-on-topic paper. **From now onward, all submissions include the references
4 (Oct 2)	Discussion of final survey titles. Assignment#4: due the following Monday: requires a revised annotation for one paper.
5 (Oct 9)	Thanksgiving day, Reading Week (Sat., Oct. 7 – Sun., Oct. 15, 2023; No Classes)
6 (Oct 16)	Discussion of annotations. Assignment#5: due the following Monday: requires draft annotations of 4 more most-important papers (making it 5 papers annotated so far).
7 (Oct 23)	Discussion of annotations. Assignment#6: due the following Monday includes draft annotations of 3 more most-important papers (making it 8 papers so far annotated).
8 (Oct 30)	Discussion of annotations. Assignment#7: due the following Monday: includes Students to submit 2 remaining draft annotations, and converting annotations into full report. Formulate contents page with section headings and sub-headings by grouping of related papers (e.g., in chronological order, in sub areas of topic, etc.)
9 (Nov 9)	Discuss student progress. Assignment#8: due the following Monday: requires a draft survey report with contents of about half of the survey including at least 5 of the annotated papers, with the whole introduction.
10 (Nov 6)	Discussion of Draft Contents. Assignment#9: due the following Monday: requires draft report also adding contents of the remaining annotated 5 papers.
11 (Nov 13)	Discussion of Draft Submissions. Assignment#10: due the following Monday: requires a draft of the near complete survey with abstract, introduction and conclusion, references, with annotations as Appendix.
12 (Nov 20)	Discussion of Draft Submissions. Assignment#11: due the following Monday (Nov. 27): submit final draft of survey. Also, do SET by now.

**** Note: the assignment for each week is listed in the schedule and will be due the following Monday. The final version of the survey for grading must be submitted no later than one week after the Monday of the last week of classes or on December 11, 2023.**

Note: Important to start reading and summarizing. Do the assignments as in the schedule and keep a record of your work in your Comp-8100 (60-510) log showing what you have done and submitted and your meetings with me. You do the work.

Questions?

Lecture Notes on: Review of Progress on Bibliography, Introduction to Latex and Discussion of Annotation Format.

- 1. To find top articles related to your research topic, Use Leddy library sources such as OMNI, ACM Digital library, Google Scholar search, search on credible IEEE and Springer LNCS proceedings and journals and other Scientific publications from core CS journal and conference ranking: <http://www.core.edu.au/>.**
- 2. Form one research question with your research topic that allows you to isolate some keywords to use for search for the important papers.** EG. For one of the topics in class, “Deep Learning for Social Networks Opinion Mining”, a question is: “How can we use opinions from users on different products or on features of a product to do analysis with deep learning?” Some keywords from this can be “user opinions”, “product features”, “feature recommendation”, “deep learning technique”.
- 3. Each of the specific keywords can be refined further using specific terms to narrow the search. For example, “user opinions” or “user review” or “user ranking”, etc. Going through a good strong paper in the topic can also help with refining the topic.**
- 4. The goal is to select an important research paper in the topic area that is recent, and/or with high impact measured with such factors as citation counts, reputation of the author or research group, etc. Some other related important papers may also have been cited by this paper and are included as important with reasons why they are important.**
- 5. Now, that we have selected a few important papers, we shall keep looking for more until we have got the 20 most important papers. All our selected papers have to be presented as our Reference List in our Report correctly using the APA format. Start formatting and presenting your Reference list as you are gathering them in a file. For Latex, a bibliography file is called a .bib file while the actual report or document using (citing) these references is called a .tex file.**

How to Format a Paper in MLA

Do you need to know how to format your paper before handing it in? Here are general guidelines that apply to your entire paper. These guidelines come from the MLA (Modern Language Association) Style Center's web page "Formatting a Research Paper." If you need more help, consult the MLA Handbook for additional information.

1. Use white 8 ½ x 11" paper
2. Make 1 inch margins on the top, bottom, and sides
3. The first word in every paragraph should be indented one half inch
4. Indent set-off quotations one inch from the left margin
5. Use any type of font that is easy to read, such as Times New Roman. Make sure that italics look different from the regular typeface.
6. Use 12 point size
7. Double space the entire research paper, even the works cited page
8. Leave one space after periods and other punctuation marks, unless your instructor tells you to leave two spaces

Other Grammar guidelines

1. Make correct English sentences and not phrases. A correct sentence is generally in the simple format of: "Noun/pronoun verb Noun/pronoun", where a noun/pronoun can be qualified with an adjective (e.g., good, happy). You can have conjunctions (and) and disjunctions (or) and negations (not) as qualifiers and links for many parts of the sentence. This is not a course on English grammar but indicates that you watch out for correct grammar as much as possible. Follow the simple rule of:

1. Singular Noun/pronoun goes with plural verb. For example, John reads the book.
2. Plural Noun/pronoun goes with singular verb. For example, We read the book.
3. Every sentence ends with a period.
4. Every punctuation is followed by one blank space.
5. All citations go inside a sentence and not outside the sentence. For example, some of the information in the section on How to Format a Paper came from (Chegg, 2020).
6. Make complete sentences and not just phrases.
7. Do not start a sentence with citation unless properly done as in APA format examples given earlier on.

References

Broadhurst, R. G., & Maller, R. A. (1991). Sex offending and recidivism (Tech. Rep. No. 3). Nedlands, Western Australia: University of Western Australia, Crime Research Centre.

Chegg, Prepp. (2020). "EasyBib Guide to APA Format Papers", EasyBib Web site, <https://www.easybib.com/guides/citation-guides/apa-format/>. Sept. 28, 2020.

Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in

personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation: Vol. 38. Perspectives on motivation* (pp. 237-288). Lincoln: University of Nebraska Press.

Jaques, P. A., & Viccari, R. M. (2006). Considering students' emotions in computer-mediated learning environments. In Z. Ma (Ed.), *Web-based intelligent e-learning systems: Technologies and applications* (pp. 122-138). Hershey, PA: Information Science Publishing.

Junho, S. (in press). Roadmap for e-commerce standardization in Korea. *International Journal of IT Standards and Standardization Research*.

Sawyer, S., & Tapia, A. (2005). The sociotechnical nature of mobile computing work: Evidence from a study of policing in the United States. *International Journal of Technology and Human Interaction*, 1(3), 1-14.

Wilfley, D. (1989). *Interpersonal analyses of bulimia: Normal-weight and obese*. Unpublished doctoral dissertation, University of Missouri, Columbia.

Zhao, F. (Ed.). (2006). *Maximize business profits through e-partnerships*. Hershey, PA: IRM Press.

How to Cite Sources in Research Papers

Citing sources in research and technical papers consists of two parts:

1. In-text citations
2. A works-cited list (eg. Bibliography or References) generally presented in one format such as APA, ACM, Chicago, IEEE plain, etc. Reference lists should always be sorted in alphabetical order of the last name of the first author.

There are different sources for information used in research papers, thesis and other technical documents. Examples are:

1. Articles from refereed journals and conference proceedings.
2. Books
3. Book Chapters in collections
4. Web, Blogs, Social Media
5. Unpublished technical documents.

In this course, we are expected to list and cite our sources of information in our survey using the APA citation format. Information about the APA format guidelines are provided in the blackboard and above but the updated version can be found through their web site as there are frequent updates to the APA format. I think they are in version 7. The basic approach remains the same.

Here are some examples of how to cite some of the References in my reference list above inside the text.

Example 1: In most organizations, data resources are considered to be a major resource (Brown, 2002; Smith, 2001).

Example 2: Brown (2003) states that the value of data is recognized by most organizations.

The author's name, date of publication, and the **page(s)** on which the quotation appears in the original text should follow direct quotations of another author's work.

Example 1: Brown (2002) states that "the value of data is realized by most organizations" (p. 45).

Example 2: "In most organizations, data resources are considered to be a major organization asset" (Smith, 2003, pp. 35-36) and must be carefully monitored by the senior management.

INTRODUCTION TO LATEX

Use the files in the 60-510/tex/ directory to discuss.

In particular, use the file ReadMe.txt.

An example .tex file of our paper entitled " " at this link is in the file: texttemplate1.tex with its .bib file in reftemplate1.bib can be used. The generated .pdf file paper is in texttemplate1.pdf.

This template shows how Latex commands for actions such as: including document class to be used, declaring bibliography style, beginning a document, inserting paper title, authors, making paper title page, inserting paper abstract, starting a new section, or sub section, inserting citation, inserting a table, inserting a figure in another file saved as either eps, png or any other format, inserting the .bib file to be used and ending the document.

Other formatting aspects are also discussed and these include:

1. How to declare math environment for using Math symbols such as sigma using opening and closing \$ \$ signs,
2. How to start an enumeration using `\begin{enumerate} ... \end{enumerate}` instructions.
3. How to start an itemization using `\begin{itemize} .. \end{itemize}`.
4. How to compile a latex document (.tex) in our cs server using the instruction: `pdflatex file.tex`

5. And more. Students were informed to follow through with learning more and can download any of the current Latex IDEs such as Overleaf, Lyx or TexStudio to learn more and perfect use of the text editor.

References

ACM, IEEE, AAI. (2023). Computer Science Curricula 2023 Version Beta March 2023. <https://csed.acm.org/wp-content/uploads/2023/03/Version-Beta-v2.pdf>. pp 1-377.