Conventions of peer reviewed journal articles

## Assignment 1: Find articles

For this assignment, you must complete the following:

* Go to info.lib.uh.edu and make your way to an engineering database. First click on “Databases & Guides” and then click on your major.
* Choose one of the databases and then search for something in your major that you are interested in.
* Choose three articles related to that topic. Your articles should be from peer reviewed journals. Use the limiting or search tools on the left side to choose peer reviewed journals only. In Science Direct, for example, you would choose “Research Articles” on the left. In Academic Search Complete, you would choose “Scholarly (Peer Reviewed) Journals” on the left.
* Upload those articles in a Word document to Assignments--Conventions of peer reviewed journal articles—Assignment 1: Find Articles.

## Assignment 2: Citations

For this assignment, submit a Word document that contains the complete end of document citations/references for each of the three reference articles that you chose in Assignment 1: Find articles. You do NOT need to write each citation for each reference in each article. That could be hundreds of citations.

Instead, merely write the complete reference or citation for the three articles you chose as if you were citing that particular article in your own paper. So if you chose an article called "Nanoscale microscopy in zero gravity” from the journal *Nature*, you would write a citation for that article itself as well as the other two articles that you chose.

To complete this assignment, you must:

* Find the citation system used in your major.
* Google your major society and “author guidelines” or “references.” For example, if you are in mechanical engineering, Google “ASME author guidelines.”
* Use that guide to write the correct references in your major.
* Search around to find an appropriate referencing system if you have trouble finding one immediately.
* Submit the Word document containing the correct references to the Assignments tab “Assignment 2: Citations.”

## Assignment 3: Standard headings

For this assignment, submit a Word document containing the following:

* A list of each heading for each article. First, write down each correct citation you used for Assignment 2. Then, write each heading in an outline format showing which headings are heading 1 and which are heading 2 and so on. For example, you would say:
  1. Abstract
  2. Introduction
     1. Purpose
     2. Problem
     3. Scope
  3. Methodology
     1. Experimental setup
     2. Literature review
  4. Results
* Complete the list for each article.
* Write a paragraph at the end explaining any similarities you see in the documents. Which headings are most common? Which headings are basically the same thing but one article calls it something different? Note any differences and similarities and try to analyze why those similarities exist.
* Look through the required headings for your recommendation report (chapter 8, page 129 in Finkelstein’s *Pocket Book of Technical Writing*) and write out each heading using MS Word’s automatic headings (Heading 1, Heading 2, Heading 3). If you aren’t familiar with the automatic headings, try Googling it to find out how to use it.
* Submit your Word document to the Assignments tab “Assignment 3: Standard headings.”

## Assignment 4: Titles

For this assignment, submit a Word document to the Assignments tab that answers the following questions about the three articles you chose (write in complete sentences, and use bullets for each question):

* What is the title of each article?
* How specific is each title?
* Which words do you have trouble understanding? Which words do you know but a non-engineering major may not know?
* What does the use of those words tell you about the audience of the article?
* Based on what you answered above and any other information you gathered from the titles, what would you tell freshman students just entering engineering about how professionals write titles of their articles and reports? What advice would you give them about writing titles in engineering?

## Assignment 5: Incorporating figures

For this assignment, submit a Word document to the Assignments tab that explains the following about the three articles you chose:

* How many pages are in the article?
* How many figures are in the article? If an article has a single figure that is composed of 4 separate figures (Figure 1.a, Figure 1.b, Figure 1.c, Figures 1.d), list those as 4 separate figures.
* How many tables are in the article?
* Which sections of the document contain each figure and table? For example, say
  + Methodology: 4 figures, 1 table
  + Results: 3 figures
* What is the ratio of figures to pages and tables to pages?
* What does this ratio tell you about how authors use figures and tables? Explain. If you were going to tell a freshman engineering student about how engineers use figures and table, what would you tell them? Go into detail and try to teach a beginning student something useful.

## Assignment 6: Labeling figures and tables

For this assignment, submit a Word document that explains the following for each figure and table in each article (if the answers are the same for each article, you do not need to go through each article or figure and table separately):

* Where are labels or captions for figures in relation to the figure (above the figure, below the figure)?
* Where are captions for tables in relation to the table (above, below)?
* Are there any tables or figures that do not include a caption?
* How many sentences are included in each caption? For this one, go through each figure and table and list how many sentences it is. Use bullets for each one in each article.
* What is average number of sentences for table and figure captions?
* Is the first sentence a complete sentence? Review complete sentences here: <http://www.chompchomp.com/terms/completesentence.htm>
* How many of each figure and table include first sentences that are fragments? What is the ratio?
* What advice would you give a freshman engineering student about how engineers label figures and tables? Go into detail here.
* Insert your own figure into the document and label it correctly using Word’s automatic figure captions. If you aren’t familiar with Word’s automatic captions, try Googling it.

## Assignment 7: Introducing figures and tables

For this assignment, submit a Word document that explains how figures and tables and introduced in the text of the three articles. Are they introduced by name? How are they introduced? Does the article ever say “the figure below” or “the figure above”? What advice would you give for a freshman student in engineering about how professional engineers introduce figures and tables?

## Assignment 8: Abstracts

For this assignment, read through each abstract of each article and submit a Word document that explains to a freshman engineering student how to write an abstract. To complete this assignment, try doing the following:

* How long is each abstract? How many words? How many sentences?
* How does each sentence correspond to a section in the report (Introduction, Methodology, Results, Discussion, or others)?
* Is an abstract an introduction to a report or does it actually give the results, too?

## Assignment 9: Introductions

For this assignment, submit a Word document that explains how to write an introduction to a report. Use the three articles as a guide. First, examine each article’s introduction and then try to figure out what each one is doing? What is the first sentence like? Is there a problem the article is trying to solve? If so, where is it described? Go into detail using the articles.

## Assignment 10: References

For this assignment, submit a Word document that explains to a freshman engineering student how engineers use references (explain in detail how engineers use citations):

* Find examples of in-text or in-paragraph citations in each article.
* What is being referenced? Is it a quote, paraphrase, or summary (try Googling these terms if you aren’t familiar with them)?
* Why does the author choose those specific things to cite?
* Does the author ever quote anything? Why or why not?