Please read these standards carefully. They are not complicated, but in addition to having great content, I fully expect papers written for this course to meet these minimal and basic standards expectations for quality and professionalism. These standards apply to all papers written for your semester projects, regardless of subject.

Writing Tools

You can use Latex, MS Word, or any other typesetter you like. If you are a PhD student, I strongly suggest you learn Latex. It takes time to learn, but the advantages in speed of use, control, and flexibility will save you hundreds of hours when writing a long document such as a PhD dissertation. It’s probably not worth learning Latex to a write a few papers.

Formatting and Length

The length will depend on the exact format of your project. As a general guideline, if your deliverable is entirely a paper, as opposed to software, 8 to 10 pages is about right. More precisely, your paper should be long enough to say what you need to say, and no longer.

Your paper should have well defined sections and subsections, much like you see in the better research papers we read for the class. Section and subsection headers should be bold-face, larger than normal text, and numbered sequentially. The paper must start with a title and an author (you), formatted larger than the text and in bold-face.

Figures and tables must appear on the page where they are first mentioned, or as soon after as is practical. Note that Latex does this for you automatically. You must discuss every figure and table in the text. Table captions should appear above the table and numbered sequentially. Figure captions should appear below the figure and numbered sequentially.

Paragraphs should be fully justified. I know that MS Word turns on “ragged right” by default, but every US style guide says to use full justified except when you have very narrow columns.

References and Citations

A list of references must appear at the end of the paper. References must include all information needed to find that reference, including title, author, name of the publication (journal, conference, etc.), year published, pages, and volume and number if relevant. The exact contents depend on the type of reference. For example, a journal paper usually includes a volume and number and conferences usually include the conference location. References that are published online must say “published online” and include a URL and a last access date.

Every reference must be cited at least once in the paper. Alphabetize references by family name (surname) of first author. Citations should be numeric, and the citation key (for example, “[2]”) must
appear in front of the reference and in the paper. Citations are not nouns, but are parenthetical elements. Thus, “… as written by [4]” is incorrect, but “… as written by Harman [4]” is correct.

**English, Grammar, and Style**

Good writing is hard, and even harder if English is not your first language. I want to emphasize that I expect you to do your best. Edit carefully enough to fix all the problems that you can find. Some specific suggestions:

- Use a spellchecker and pay attention to it. Also remember that spellcheckers can’t find everything … for example, “though,” “through,” and “tough” are all correctly spelled words.
- Take care with grammar checkers. They give false positives as well as false negatives, so before changing your sentence check the rule. They get more confused with complicated sentences, so when they do give a false positive, ask yourself whether the sentence should be simplified, for example, by splitting into two sentences.
- Grammatical mistakes slow down and confuse readers, but structure and organization is much more important.
- Active voice is good! It takes fewer words (which will help you with page limits), is easier to read, and quicker to understand. Likewise, simpler words are often better than complicated words. For example, look up the difference between “use” and “utilize.”
- Apostrophes are used for ownership and contractions, but never plural. Thus, “we have two ATM’s” is wrong, wrong, wrong. It should be “ATMs.”
- I don’t have a problem with first person (“I” and “we”). But “we” in a single-author paper looks strange.
- Gendered pronouns: Like most old folks, I was taught that “he” and “him” should be used for both males and females. But culture evolves, and a common view now is that rule perpetuates male-dominance. I happen to agree, although I will not complain if you follow the old rule. Some official language sources have recently decided to accept “they” as a singular pronoun, so although I might wince if you write “the tester …, then they …,” it is common and gathering acceptance. Using both (“he or she”) is fine but a little awkward. I prefer to use plural as much as possible, use a real pronoun with a real person with a real gender when necessary, and write a passive sentence when I am really stuck.
- Your fifth grade teacher may have told you not to start sentences with “And” or “Because.” And MS Word just complained that I started a sentence with “But.” But it’s fine to start a sentence with “But,” “And,” and “Because.” Those are considered emphasis words, so don’t overuse it.
- “Which” is a challenge for many people and for several reasons. First, it’s used incorrectly a lot, so our eyes have been trained to accept incorrect use. Second, the rule about restrictive and non-restrictive clauses is confusing. Third, the rule is different in American- and British-English. The summary, however, is simple: if you have a comma, use “which.” No comma? Use “that.”
- Lists are fine if they are not over-used. Bullets should be used when the order is not important, and numbers should be used when order is important. For example, if you find yourself writing “in the third bullet, …,” then you should go back and change that to numbers. “Item three” makes more sense.
- Generally, single-digit numbers should be written in characters (“seven”), and multiple-digit numbers should be written in numeric form (“42”). But that’s not a hard rule.
- Commas, semicolons, and periods go inside quotes. Question marks and exclamation points go outside quotes.
• A recent mistake that has spread throughout our field is to stick in a slash when the writer is too lazy to decide whether it should be “and” or “or.” Don’t be lazy. Stop and think, and use the correct connector.

• Don’t depend on color. I will almost certainly print on a black and white printer (not “black/white”), so the color will disappear. If I can’t tell the difference between the green and the blue bar, then I can’t read your paper.

• If you use MS Word, please turn off the hyperlinking. It is distracting in print. If you expect your document to be read online, write in HTML.

• Use Greek and Latin sparingly, but correctly.
  o “et al.” is short for “et ali,” which means “and others.” You can use it in the text, but never in the reference list.
  o “e.g.” abbreviates “example grati,” which means “for example.” “i.e.” abbreviates “id est,” which means “that is.” Lots of people confuse the two, so I suggest avoiding them.
  o “Criterion” is singular and “criteria” is plural.

**How to Get a Bad Grade**

I fully expect, and certainly hope, that everyone will do very well. But just in case you want to get a low grade, here are a few simple strategies for doing so.

• Don’t edit your writing. I can tell if you give me first draft. I won’t give you first drafts of my work, and ask for the same respect.

• Mess up the references.

• Write things that don’t make logical sense. If you make a conclusion, make sure the previous sentences support the conclusion.

• Forget to state **what** you are doing and **why** in the introduction. Motivation is hard, but one of the most important factors in writing a good paper.

**Miscellaneous**

Yes, you can ask anybody else to read and comment on your paper. If someone else actually writes something, that person must be a co-author. Which could be a problem.

I encourage you to use the on-campus writing center. Not only are they helpful, you pay for it, so might as well use it.

Submit PDF and source files (.docx or .tex and .bib) on piazza.