ERE Style Guide

1. Formatting requirements

- a. All reports should have 1" margins.
- b. Unless other instructions are given, electronically submitted reports should be single-spaced, while printed reports should be double-spaced.
- c. If possible, reports should be double-sided.
- d. Your last name and the page number, e.g. Ruiz Page 18, should be right-aligned in the header of each page beginning with page 2.
- e. You must include either (a) a title page or (b) a section at the top left corner of your first page, that contains the title of your report, your name, the course name, and the date.
- f. Report, poster and project titles should be descriptive. For example, rather than "Lab 3," you might write "Impact of Budworm Predation Rate on Balsam Fir Surface Area."

2. TFG: tables, figures and graphs

- a. Relevance: Every table, figure and graph should have a purpose. If they do not communicate meaningful information to your readers, they do not belong in your report.
- b. Placement: Explanatory tables, figures and graphs that are addressed directly in the text, should be embedded as closely as possible to the appropriate paragraph. Supplemental data tables (e.g. for numerical methods) which are not critical to understanding the text but which are required by your instructor may be included in an appendix.
- c. Quality, fonts and color
 - i. Images must be of publishable quality, i.e. they should be the same quality as the text. They may not be "fuzzy" or pixelated.
 - ii. All text must be legible. Table headers, and figure and graph footers, should have a similar font size to the main text. You may choose to switch from a serif in the main text to sans-serif in the headers and footers, but do not shrink or swell the font size significantly.
 - iii. Use appropriate superscripts and subscripts in your text and captions.
 - iv. If color is necessary to understand your table or figure, make sure that all submitted copies are in color. Do not expect your reader to differentiate between shades of grey, unless they are also differentiated by shape (e.g. dashes or dots).

d. Required elements

- i. Tables
 - The header should be listed as Table 1. Title of table, e.g. Table
 Impact of porosity on flow rate.
 - 2. Typically, there is no footer on a table, unless it is functioning as a descriptive or explanatory note.
 - 3. All columns must have a heading. (Note: the ASCE guidelines pages 32-33 include examples for subsumed column headers, should you need to nest column content.)
 - 4. Graphics should not be included in tables. Equations may be included, if necessary; however, *numbered equations* may not be

- present in tables (i.e. numbered equations must be introduced elsewhere in the text).
- 5. If possible tables should not cross the page. If a table must be on more than one page the column headers should be repeated on all pages.

ii. Figures and Graphs

- 1. There are no headers for figures or graphs.
- 2. Figure and graph footers should be listed as Fig. 1. Title of figure/graph, e.g. Fig. 1. Solar panel decay.
- 3. Graph axes must be clearly labeled.
- Include a key if one is necessary to understand the image. Do not expect your reader to intuit any abbreviations, acronyms or symbols.
- 5. Ownership of the image must always be clear. Readers will assume that an image belongs to the author, unless it is otherwise cited. Cite the image as you would any other in-text reference, e.g. Fig. 1 Panel soiling (Boyle 2016), and then create a listing in the References section for the image. Uncited imagery is plagiarism.
- 6. You must have permission to use an image that is not your own, unless it is in the public domain or Creative Commons. See the ASCE guidelines pages 34-36 for instructions specific to image use and public domain.
- 7. Note that redrawing another person's figure does not make it your own.

3. Citations

Note: The ERE department has adopted the ASCE citation guidelines for use in all courses. Pages 29-32 of <u>Publishing in ASCE Journals: A Guide</u> <u>for Authors</u> explain the ASCE citation format in detail. Unless an assignment gives specific instructions otherwise, all ERE classwork should follow ASCE guidelines.

a. References section

- The References section includes published works only. Published works do include theses, dissertations, and articles which are currently in press.
- ii. The References section should be ordered by author last name. In the case of works by authors of the same last name, alpha sort by last name, then first (and middle, if given) initial (e.g. Chin, J.C. would come before Chin, R.). In the case of multiple works by the same author, sort by last name, then first initial if applicable, and then date of publication. If there is no author name, then sort the title in the name position. (E.g. a web page on "Demand Response" would come after Avila, A. and before Dunbar, B.) Note that while some citation styles list only the first author by last name first, ASCE reverses all of the authors' names, e.g. Aziz, H.A., Bandyopadhyay, J., and Singh, R.

- iii. All listed references must also appear in the text. Likewise, all references cited in-text must appear in the References section, with the exception of unpublished works (see below).
- iv. The three most common sources of material you will use in ERE classes are books, journal articles, and websites.
 - 1. Books: If you use a whole book, or numerous segments throughout a book, you do not need to list the page numbers. If a specific chapter is being used, the chapter title and associated page span(s) should be included. If you are citing a few specific pages from the book, list the page numbers. Books will typically follow the format of last name, first initial (year). "Book title", Publisher, City, State/Country. Chapter: pages. For example: Chapra, S.C., and Canale, R.P. (2015). Numerical Methods for Engineers: Seventh Edition, McGraw-Hill Education, New York, NY. Chapter 13: 356-363.
 - Journal articles: Articles are typically listed by last name, first initial (year). "Paper title." Name of Journal, issue, pages. For example: Alstone, P., Lai, P., Mills, E., and Jacobson, A. (2014). "High Life Cycle Efficacy Explains Fast Energy Payback for Improved Off-Grid Lighting in the Developing World." Journal of Industrial Ecology, 18(5):722-733.
 - 3. Websites are a little more complicated, because authorship and publication date are not always evident. Scroll to the bottom of the web page to check for author and date information; you may also want to check the html meta tags. Include all of the following that are available: Author Name. (Year of publication or last revision). "Full title of the document or page." Title of the complete work or website <full web address, enclosed within angle brackets> (Date of the visit). For example: California Environmental Protection Agency. (2017). "About the Water Board." State Water Resources Control Board https://www.waterboards.ca.gov/about_us. (July 29, 2017). Be aware that your "author" may be an entity, as above.
 - 4. Additional media formats, including maps, building codes, and conference proceedings, can be found in the ASCE guidelines.
- b. Standard in-text citations
 - i. Standard in-text references must cite the author's or authors' last name(s) followed by the year of publication, in parentheses. E.g. (Mirzakhani 2014) or (Akasaki and Amano 2006).
 - ii. See the ERE Writing Guide for methods to skillfully integrate in-text citations without muddying your sentence flow.
- c. In-text citations for unpublished works
 - i. Unpublished works should be cited in-text only, following the format of author name, source type, year. This is the same as the standard format, with the addition of the source type. For example: (Grafman, unpublished data, 2017), (Cashman, personal communication, 2016), (Lang, lecture, 2017) or (Finney, lab handout, 2017).

4. Academic integrity

- a. Department policy
 - i. The American Society of Civil Engineers Code of Ethics includes Canon 5 which states "Engineers shall give proper credit for engineering work to those to whom credit is due, and shall recognize the proprietary interests of others. Whenever possible, they shall name the person or persons who may be responsible for designs, inventions, writings or other accomplishments." ERE graduates, their employers, ABET, all licensed professional engineers and society in general want the integrity of the ERE program upheld, thus the ERE faculty expect ERE students to behave in a way that upholds the ethics of the engineering profession. Ethical behavior includes avoiding plagiarism in all creative works. ERE students are explicitly taught to recognize and avoid plagiarism in many ERE courses, including ENGR 115, ENGR 215 and ENGR 492.
 - ii. Plagiarism (the unacknowledged use of materials or ideas prepared by others) and cheating are very serious offenses that will almost always result in failure of the course, and if done repeatedly, possible expulsion from the CSU system. Plagiarism and cheating are also offenses to one's personal honor and to one's respect for one's own personal capabilities. All ERE student assignments are expected to be one's own original work, and one is expected to properly reference material that one uses which is not one's own original work. Students should consult with the course instructor before using any of their own work from another course. If a student is not sure what is considered plagiarism, that student should consult with their instructor. It is each ERE student's responsibility to know this department policy and Humboldt State University's policy regarding academic honesty.
 - iii. The ERE department encourages students to work with others to learn difficult material, as long as each person is responsible for their own learning. When a student works with others on significant documents. then the student must indicate the names of all collaborators. It is unethical to represent someone else's work as one's own. The ERE department may use TurnItIn or other software to check ERE student work for plagiarism whenever possible. Students who copy even the smallest amount of work of another, whether by accident or on purpose, will be subject to the HSU Policy of Academic Honesty. Students who copy the work of others (including web pages, journal articles, homework, programs, or Excel spreadsheets) will almost always receive a disciplinary F in the course and will be reported to the Dean of Students. Please note that the disciplinary F (FD grade) may not be replaced to improve one's GPA by retaking the course. In special circumstances, students in 100 and 200 level courses may receive a zero on the assignment in lieu of an FD in the course.

b. Plagiarism and synthesis

- Plagiarism is the use of someone else's intellectual or creative work without clear citation.
- ii. Intellectual or creative work in STEM fields includes (but is not limited to) data, figures, graphs, photographs, code, novel ideas and terminology, phrasing and sentence structure, theories, and research.
- iii. To avoid plagiarizing, you must:
 - 1. Place quotation marks around any direct textual quotations. Quotations include sentence fragments and phrases, unless the phrases are commonly used within the field.
 - 2. Provide an in-text citation and a listing in the References section any time you use someone else's intellectual or creative work. If you draw conclusions from someone else's data, you must cite their contribution.
 - 3. If you have collaborated with another person, it is considered plagiarism to take full credit. Make sure to cite your coresearchers for their work!
 - 4. Some faculty may require you to include citations on figures that you create, in order to make it absolutely clear where ownership belongs. In these cases, cite yourself in-text (e.g. Fig 1. Damaged culvert (Johannes 2017) as if you were any other unpublished source. (In the case that you have in fact published your figure elsewhere, also include a listing in the References.)
 - 5. A reader must always be able to determine which ideas you own, and which ideas you have gained elsewhere.
- iv. Academic integrity requires you to go beyond reproduction and to synthesize what you have read. Even if you have adequately cited your source(s), if you have essentially reassembled another author's words without offering your own interpretation, you will not receive credit for your writing. Citation alone is not enough to earn academic merit. (If it were, a well-quoted textbook could count for student work!)
- v. The only way that you can be confident about what is common knowledge within a field versus what is intellectual property is to become conversant with the larger topic discourse by reading multiple sources. See the appendix for strategies to accomplish synthesis and avoid plagiarism in your writing.

c. Professional integrity

i. Our graduates design solar arrays that power refrigeration for rural hospitals, and culverts that keep schools from flooding. They analyze greenhouse gas emissions for fuel projects, and develop transportation and energy strategies around the world. They are responsible for clean water, safe and reliable electricity, and climate change mitigation. With these hefty responsibilities, it is imperative that you are honest and accurate, that you readily admit error or uncertainty, and that you cite all source material and contributions faithfully so that your colleagues can interrogate and replicate your work. Integrity is critical for a career in engineering.

ERE Style Guide: Appendix

1. One tactic for synthesizing content and avoiding plagiarism

First, read multiple sources on the same topic. While you are doing so, flag (using digital highlighters, sticky tabs, notes, etc.) key pieces which provide novel ideas or specific information that you might need to later cite. Next, when you have acquired a fairly robust understanding of the topic, put all the research material to one side, and write without consulting the original sources. If you come to a place in your writing where you will need a direct quotation, leave a note to yourself, e.g. <insert L.B.'s ppg on salt-based deterioration>, but don't yet return to the source for the exact quote, unless you need to check key data before you keep writing.

After you have finished the draft paragraph or section, read it again and ask yourself:

- Have you synthesized what you read, or simply repeated it without interpretation?
- Have you thought about whether the arguments or ideas you read actually make sense to you?
- Do you understand where there are reasonable disagreements between experts in the field, and are you addressing those if necessary?
- Are you contributing something novel, even if it is just the application of a larger theory to your working problem?
- Are you "performing" for a grade -- think of a typical short-answer response on a high school exam -- or are you conveying knowledge that will be useful to your readers?

If you've achieved synthesis, edit your writing for clarity and to remove any "echoes" of source material that aren't actually useful for your new piece. Then mark each section which owes intellectual debt to a source. Cite each of these in-text and in the References, and also insert your direct quotations now. Review the section again, and confirm that the flow between your narrative and any inserted quotations and citations is logical. A reader must always be able to determine which ideas you own, and which ideas you have gained elsewhere.

The only way that you can be confident about what is common knowledge within a field versus what is intellectual property is to become conversant with the larger topic discourse by reading multiple sources.