

Winter 2024 CS 640 Writing in Computer Research Syllabus

January 3, 2024

Class Time: Mondays, 10AM–11:20AM

Class Location: 200 Deschutes

Instructor: Prof. Anthony Hornof

Office Hours: Mondays 12PM-1PM, and Thursdays 4PM-5PM

in 356 Deschutes and at <https://uoregon.zoom.us/j/6792271357>

Overview

Course Description: Students develop their ability to write as is critical in computer science research. Students will submit writing samples, and provide and accept constructive criticism with their peers, in a workshop format. Students will read and discuss authoritative texts on technical writing, and apply what they learn from the assigned readings to their writing.

Some of the topics will include: technical writing, thesis statements, topic statements, making and supporting an argument, parallelism, ambiguous pronouns, and use of the first person.

Course Summary: Every week, students will produce a 500-1,000 word writing sample, provide a written critique the work of other students in the class, and discuss these critiques in the class.

Digital Resources

The Dropbox folder “CIS 640 Writing in Computer Research”. All students have been given access to this folder. This includes the weekly readings; folders for all student work, including critiques; and the critiquing assignment matrix.

The CIS website at <https://classes.cs.uoregon.edu/24W/cs640/>. This currently just has this syllabus

Readings

Here are examples of the readings that will be assigned. If the reference is to a book, only a chapter or two will be assigned (not the whole book). All of the readings will be provided to students as PDF files.

Blackwell, J., & Martin, J. (2011). A scientific approach to scientific writing. Springer Science & Business Media.

Dugan, R. F., & Polanski, V. G. (2006). Writing for Computer Science: A Taxonomy of Writing Tasks and General Advice. *J. Comput. Sci. Coll.*, 21(6), 191-203. <https://dl.acm.org/doi/10.5555/1127442.1127468>

- Huckin, T. N., & Olsen, L. A. (1983). *English for science and technology: A handbook for nonnative speakers*. McGraw-Hill College.
- Kane, T. S. (2000). *The Oxford Essential Guide to Writing*. Berkley Books.
- Lebrun, J.-L. (2007). *Scientific writing: A reader and writer's guide*. World Scientific.
- Turabian, K. L. (2018). *A manual for writers of research papers, theses, and dissertations: Chicago style for students and researchers*. University of Chicago Press.

Writing and Critiquing Assignments

Each student will write **eight** original documents, at most one per week, each totaling 500 to 1,000 words. Each document should be some sort of technical writing for computer research (from Tables 1-3 in Dugan and Polanski, 2006). The writing should incorporate ideas from the assigned reading.

By 10PM Thursday night of each week, each student will put into the shared Dropbox file structure (described below) the following two items:

1. A new 500-to-1,000-word piece of technical writing.
2. A revised version of technical writing submitted in a previous week (except on Week 2).

By 10PM Saturday night of each week, each student will put, into the same Dropbox file structure, critiques of the work of other students based on the assignments in the Critiquing Matrix file on Dropbox.

Reading Assignments

Each week, students will be assigned some reading. Students should come to class with a coherent 2-minute verbal summary about the topic of the reading, and what they learned from the reading. You do not need to write a summary of the reading, but you should be incorporating what you learn into your writing and your critiques.

The reading is on Dropbox in a folder called “Readings”. The reading for Week *n* is the files that begin with *n*. For example the reading for Week 2 might be:

- 2a - Dugan (2006) Taxonomy of CS Writing.pdf
- 2b - Turabian (2018) Constructing Your Argument.pdf

Prerequisites

Students are expected to have mastery of English grammar. Students are expected to be able to write documents, for example, with noun-verb agreement, correct use of articles, no comma splices, and so on. As one guide, students should have mastered everything under “General Writing / Grammar” at https://owl.purdue.edu/owl/purdue_owl.html.

Document Formatting

Each document submitted (writing documents or critique) must:

1. Include the name of the author, and the date it was written or most recently revised.
2. Be double-spaced so that comments can easily be added.
3. Be in PDF format.
4. Have page numbers (if the document is more than one page).
5. Be at least 12-point typeface, with at least 1-inch margins. No small-print double-column, such as IEEE format.

Document Content

Each writing document submitted must also meet the following criteria.

1. The submission must include (or be accompanied with) a summary of what the document is, including information such as (a) to which genre and category it belongs in Dugan & Polanski (2006) Tables 1-3, (b) who is the audience, and (c) what is the goal of the document.

For example: "These are the research notes written up (by Anthony Hornof on 9-19-19) after a meeting with my research colleague David Kieras at the University of Michigan. The notes are sort of a combination of (a) meeting minutes, (b) entries in a research journal, and (c) preliminary drafts of research papers. The audience is primarily Dave Kieras and myself. The goal is to capture the ideas that we generated with regards to the cognitive modeling during our extensive meeting on that day."

2. The submission must be a self-contained, stand-alone, complete document. For example: It can be a part of a larger document that is being drafted, but should also be able to stand on its own as a solid and clear communication. And there should be no extra notes hanging on at the end of the document.
3. For any papers reporting experimental work, the experiments must be completed. (You cannot still be collecting data.)
4. If the submission is a section of a larger document, such as a paper that is being written for a journal or conference, every word must have been written by you (none by co-authors), and the submission must also be accompanied by the following:
 - a. A working title for the submission.
 - b. An Abstract for that paper which provides a straightforward summary the anticipated paper.
 - c. The URL for the call-for-papers for the conference(s) to which it is likely to be submitted.
5. The submission must include full references for any cited works. (These do not count towards the 500 to 1,000 words.)

6. The submission must be original work that relates to your research activities, and not to any work that you are doing for a class. You cannot use this class to develop work for other classes. But note that there are many kinds of research documents that you can (and should) be writing on a regular basis. See Dugan & Polanski (2006) Tables 1-3, in which they list dozens of routine writing tasks in computer science, for learning, academic communication, and industrial communication. You should be engaged in many of these every week. Please let me know if you have any trouble identifying weekly documents to write, and I will help you do so.
7. The work must be complete and polished. There should be no notes-to-self, to-do items, or unfinished paragraphs or sections.

Critiques of the submissions:

1. Critique the papers assigned in the Critiquing Matrix document on Dropbox.
2. Include the full name of the critiquer, and the date the comments were made.
3. Be either an annotated version of the original PDF, or a standalone document that refers to the original PDF as needed, such as referencing page numbers, paragraph numbers, line numbers, when offering critique.
4. Be informed by the assigned reading. Some comments should relate to the assigned reading. For example, you might write "This phrase could be interpreted to mean two different things. Please rewrite it so that can only mean one thing. See Kane p.266 on Ambiguity".

Shared File Structure

Student work will be organized in a single set of folders on Dropbox as follows.
(S1=Student 1. S2=Student 2 after critiquing the document.)

...

Week 4

<S1 last name>

<S1 last name> - <short summary> - <revision date>.pdf

<S1 last name> - <short summary> - <revision date> - <S2 initials> - <critique date>.pdf

<S1 last name> - <short summary> - <revision date> - <S3 initials> - <critique date>.pdf

These last two documents are the critiques made by S2 and S3.

<S2 last name>

...

<S3 last name>

...

Week 5

...

Week 10

File-Naming Conventions

File naming conventions: Note the format of the filename. The short summary should be one to three words that summarize the contents of the document. The date of last revision should be formatted as YYYY-MM-DD. A sample filename would thus be:

"Hornof - Newell 1990 Response - 2020-04-15.pdf"

All of the work done for Week <x> should be in that week's folder, not a previous week's. In other words, please make sure that all of the documents that need to read for Week 2 are under Week 2. This is particularly relevant for revised submissions.

Course Attendance and Engagement (policy)

To master the course material, students must attend and participate in every course-related activity.

The UO Course Attendance and Engagement (policy)

<https://provost.uoregon.edu/course-attendance-and-engagement-policy>

requires faculty to determine which engagement opportunities in a course (such as attendance, assignments, group activities, exams, and quizzes) can be missed or “made up” without jeopardizing a student’s opportunity to meet the expected learning outcomes for the course. Consistent with this UO policy, the instructor of this class has determined that there are *no* engagement opportunities that a student could miss and still gain mastery of the course material.

It would be impossible, for example, to “make up” attendance in a live, in-person, interactive lecture because in every meeting of this class, the following occurs:

Everything. Contained in this classroom
is a microcosm of human experience
assembled for you to query and examine and ponder

(Excerpted from Tom Wayman in “Did I Miss Anything?”, 1993)

<https://www.loc.gov/programs/poetry-and-literature/poet-laureate/poet-laureate-projects/poetry-180/all-poems/item/poetry-180-013/did-i-miss-anything/>

Attendance, Participation, and Passing the Class

However, unexpected events do occur in the lives of students and so...

You can skip, or be late, on one week of writing and still pass the class.

You can skip, or be late, on two weeks of critiquing and still pass the class.

You can have two full-day-absences, and still pass the class.

If you exceed any of the above limits, you will receive an “N” for this class.

If you are more than 15 minutes late for a class, that counts as a half-day-absence for that day. Half-day-absences and full-day-absences will be added together to determine your full-day-absences. Days that you miss because you are sick count as full-day-absences.

I advise that you do every week of writing, do every week of critiquing, and come to every class on time. If you want miss writing, critiquing, or class, save it for the last two weeks of the class. This way, you yourself can prepare for unexpected events in your lives.

You may or may not be reminded of this policy during the term. However, I will try to notify you as soon as possible that you will be receiving an “N” for this class. This might not be until grades are assigned.

Chat GPT

Chat GPT is an exciting development in computer science, artificial intelligence, and the philosophy of knowledge. However, this is a class on technical writing, not prompt-writing. Submitting text generated by Chat GPT (or equivalent tools) will be considered a violation of academic honesty, a rude prank, and a waste of educational resources. Please use this class to develop your writing skills, not to ask the instructor and your peers to evaluate Chat GPT. If it can be determined that you have submitted any text generated by Chat GPT for this class, you will fail the class.

References

Robert F. Dugan and Virginia G. Polanski. 2006. Writing for computer science: a taxonomy of writing tasks and general advice. *J. Comput. Sci. Coll.* 21, 6 (June 2006), 191–203. <https://dl.acm.org/doi/10.5555/1127442.1127468>