

CS 91/191, Spring 2019

Lecture 1

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1 Course motivation

Writing skill is lacking in computer science. This problem is pervasive across all levels, from undergraduates to senior faculty and from academia to industry. Some native English speakers produce writing just as bad as people for whom English is a second language. In your career, others such as faculty, as well as hiring and tenure committees, will continually evaluate your work and determine the type of recognition you get or the type of funding you receive. Therefore, it is important to be able to articulate what you did and why it is important. As Professor Cormen put, “You can’t do great work if no one cares or knows what you’re doing.”

It is possible to be a successful scientist because of excellent writing and communication skills as well as because of outstanding research. One example is Professor Cormen himself: CLRS is the second-most cited work in computer science. Many computer science researchers and professionals do not care about writing, but they can definitely appreciate well-written papers and textbooks. A well written paper is more likely to be cited than a poorly written one.

One goal of this course is to improve students’ writing with hope that unleashing a group of good writers in the world will raise the overall level of writing in the field.

2 Course structure

This course will be a mixture of lectures and discussion. It consists of four parts:

- *Writing.* This is the largest part of the class. Some of the topics that will be covered in the class are paper organization; how to write well structured sentences, paragraphs, and sections; grammar; usage; and figure design. However, this course will not get deep into grammar. We will “develop ear” to appreciate good grammar and lively writing.
- *Presenting.* This part discusses how to give talks: brief technical talks, conference-length presentations, colloquium talks, and job talks.

- *Evaluating.* We will see how program committees evaluate papers, and we will look at some real-life examples of such evaluations.
- *Production process.* This part is mainly about L^AT_EX, how to use it correctly, how to deal with specific problems, and how to shorten a paper without actually shortening it.

3 Course Logistics

Grading. The final grade breakdown is follows: 10% for homework assignments, 25% for the technical talk, 20% for the draft of the final paper, 40% for the final paper, and 5% for class participation.

- *Homework assignments.* There will be few homework assignments, such as critiquing papers and typesetting in L^AT_EX.
- *Technical talk.* Every student will give a 20-minute conference-length talk. For the purpose of the talk, students will be considered authors of the work they are presenting. Every talk will be followed by peer critique. Students who volunteer to present a talk early will be graded more leniently, as students who present later will benefit from hearing others' feedback.
- *Final paper.* Everyone enrolled in this class will produce a final research paper. This paper can be a writeup of current research, thesis proposal, final thesis for undergraduates, actual conference submission, or a survey paper if a student has no research to write about. There will be page limit for the paper; however, students may negotiate the limit with Professor Cormen. Since Dartmouth policies do not generally allow double-counting of work toward different credits, a student wishing to write a proposal or thesis as part of this class should discuss this goal with Professor Cormen. The paper draft is due about two weeks before the end of the term. The draft will be graded to ensure that students take the draft seriously. The final paper will be due the last day of the course.
- *Class participation.* Professor Cormen expects everyone to participate in class discussions and provide helpful critique to peers.

Books. There is only one required book for the class: *Style: The Basics of Clarity and Grace* by Joseph M. Williams and Joseph Bizup. The rest of the books listed on the syllabus web page are recommended but not required. Some of the readings will be from these recommended books, however.

Honor Principle. The Academic Honor Principle applies to this course, and violations will not be tolerated. In case of doubt about whether some action violates the honor code, do not hesitate to consult with Professor Cormen.

Additional information and policies can be found on the syllabus page: <https://www.cs.dartmouth.edu/~thc/cs191/syllabus.html>

4 Miscellanea

Do as I say and not as I do. You can easily find instances in which Professor Cormen violated his own principles in his own writing. These violations can exist for various reasons. Citing these violations is not an argument for making the same errors.

RTFB: Read The Bibliography. It is always necessary to proofread and double-check the bibliography produced by BibTeX.

Tom. From now on, we refer to Professor Cormen as “Tom.”