

This assignment has been *slightly* modified from its original form.

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CSE 549 – Introduction to Computational Biology: “Fall” 2016

Academic Honesty Review

The point of this assignment is to examine issues of academic integrity and academic dishonesty.

You should hand in your problem set *online* using blackboard. *No late problem sets accepted.*

Latex is a wonderful and powerful scientific word processor. The first homework must be done in Latex.

For the Macintosh, install Mactex and use Texshop. For linux, install texlive-full. Then you can use linux programs such as texworks, texmaker, or gummi. For Windows, install Miktex and use WinEdt, texmaker, or some other editor. You can also use online latex programs such as Overleaf or Sharelatex.

For drawing figures, I recommend using xfig, Ipe, inkscape, the Mac tool Omnigraffle. You can also use more general presentation tools such as Powerpoint, Keynote, or Libreoffice.

This writeup includes input from Joe Mitchell, Don Porter, and Steve Skiena. I welcome further suggestions from other students and professors.

Academic Honesty

These are bullet points from the course procedures document:

- I take academic honesty *very* seriously. Infractions have serious consequences—generally an F in the course (or worse), and being reported to the appropriate departmental and/or university committees.
- It is *your* responsibility to ensure that you understand what constitutes academic dishonesty. “I didn’t know that was wrong” does not excuse academic dishonesty.
- Representing another person’s work as your own is always wrong. It is wrong in this course. It is wrong in your profession.¹ It is wrong in life. It is wrong. Period.
- Always cite! If you work with multiple people, cite with whom you worked.
- Copying (or approximately copying) a solution from the web or someone else’s solution and putting in your problem set is plagiarism *even if you cite your source.*
- Sharing any part of your write-up (latex, PDF, postscript, figures, or hard copy) is academic dishonesty and invites plagiarism. Your own write-up is private information and should not be shared.

¹Plagiarizing can end your career, regardless of your skill level, your educational credentials, or how hard you have worked up until this point.

- You may be able to find solutions to some of the homework problems on the web or from more senior students. It is academic dishonesty to search for and use such solutions in preparing your own write-up for the assignment, and it is plagiarism to copy such solutions and to submit as your own (even if you cite).
- If the instructions permit, you can work together to solve problems, but you must write up your own solutions, writing only those ideas and answers that you personally fully understand, and stating in your write-up with whom you worked to obtain the solution.
- If you are in doubt about whether or not you are permitted to use particular source materials, you should obtain written permission from the professor, in advance of your submission. Such permission is best requested and obtained by e-mail.
- *It is academically dishonest to hand in a solution that you don't understand.*

Problem 1

Explain why we let students work together to solve problems, as long as the students cite their collaborators. Explain why working together is not academically dishonest in this course.

Problem 2

Explain why it is important to your professional development to struggle with a problem that you cannot solve quickly. In other words, the instructor deliberately assigns homework he knows you will likely have to think about for days or weeks to solve. What do you expect to learn from this experience?

Problem 3

Explain why, although it is ok to work with other students, it is plagiarism to share and/or copy other write-ups. Give an example of collaboration that is academically honest. Give another example of collaboration that is academically dishonest.

Problem 4

Explain why it is academically dishonest to share your solution set with another student. Explain how you could get burned from just sharing your writeup even if you do not copy yourself.

Problem 5

Explain why copying (or approximately copying) solutions from the web (or another source) is plagiarism, even if you cite your source.²

Problem 6

²In this course I ask that you *not* to scour the web for solutions to the homework problems. If there are class topics that you don't understand from reading the course materials come talk to me. But even I did let you search the web to find solutions, this would *still* be plagiarism. Why?

Explain why it is better for your grade to leave a question blank, rather than search for answers on the web. (Hint: calculate approximately how much a homework problem is worth to your raw score versus an exam question. Feel free to include the risk-benefit analysis of getting caught.)

Problem 7

Imagine that you are employed at a major software company, say Google, Facebook, or Microsoft, and commit code into a product that you copied from a website. Explain the potential risks to both you and the company if this action is discovered by the owners of the code.

Problem 8

Please speculate on why we decided to make a problem set on academic honesty.

Problem 9

How much time did this writeup take you, including the time it took to learn latex.