

Homework 0: Collaboration, Cheating, and Plagiarism

36-402, Spring 2024

Due by 6 pm on 25 January 2024

Instructions

- This course's policy on collaboration, cheating and plagiarism is part of the syllabus, <http://www.stat.cmu.edu/~cshalizi/uADA/24/>. Please read it.
- Please also read CMU's policy on academic integrity, <http://www.cmu.edu/policies/student-and-student-life/academic-integrity.html>.
- Finally, please read sections 7.9 and 7.10 of Turabian's *Manual for Writers of Research Papers, Theses, and Dissertations*¹ on Canvas.
- After reading all three documents, please complete the following true-false and multiple-choice questions. Explaining your reasoning is encouraged but not required.
- This assignment will not factor in to your grade, but you must turn it in, with at least 90% correct answers, before any of your other work will be returned to you.

Questions

1. Alice and Babur share a table in the library while they work on the 402 homework. While they work, Alice complains to Babur about how lame the problems are, and Babur posts to Facebook that it's super unfair to have the homework due the night after 15-XXX.
 - (a) True or false: This interaction is enough that Alice and Babur should report that they collaborated.
 - (b) True or false: Babur should report that he got help on the problems from Alice.
 - (c) True or false: Babur discussed an assignment with people outside the class in a way which is prohibited for homework assignments.

¹8th edition; Chicago: University of Chicago Press, 2013

- (d) True or false: Babur discussed an assignment with people outside the class in a way which is prohibited for exams.
2. Alice likes to go to the library and read old statistics textbooks for fun². One day, she discovers an example which is *very similar* to a problem in the current homework. True or false:
- (a) Alice must stop reading, and report her forbidden reading to the professor, on pain of failing 402.
 - (b) If Alice takes pictures of the example with her phone, shares them with Babur, and then asks Babur if he “can give her a hint” about how to solve that problem, she just needs to report working with Babur.
 - (c) Alice can read the example and adapt it to the homework problem.
 - (d) Alice can read the example, adapt it to the homework problem, and give credit to the old textbook in her write-up.
 - (e) Alice can post to Piazza / Facebook / anywhere else, “Hey everyone, the trick to doing problem x of homework y is on p. z of *The Over-Generalized Gamma Distribution*”.
3. Babur is hanging out in the room of his friend Chandra, who took 402 last year. While there, Babur discovers a bound copy of the 402 solutions. Chandra says “Hey, aren’t you in that class? Borrow that if you like, the professor is really lazy about writing new problems and it’ll save you so much time.” Which, if any, are appropriate actions for Babur to take at this point?
- (a) Read the old solutions, but make sure he hasn’t looked at a particular solution for at least a week before doing the relevant homework, so his work is original.
 - (b) Politely thank Chandra for his offer to help, but decline to read the old solutions. (Priggishly explaining that he will learn more by actually doing the work is optional.)
 - (c) Borrow the old solutions, but only read them when he gets stuck.
 - (d) Borrow the old solutions, but only read them when he gets stuck, and acknowledge the use of the old solutions in his write-up.
 - (e) Borrow the old solutions, scan them, and share them with his friends online.
4. Alice and Babur are back in the library working on another homework assignment. Babur asks Alice how to do problem x , and she tells him “It’s just like the example on page y of the textbook”. True or false:

²No one expects you to be like Alice.

- (a) This interaction is enough that Alice and Babur should report that they collaborated.
 - (b) Babur should report that he got help on the problems from Alice.
 - (c) Babur can follow the example, but his write-up must explicitly say that he's doing so, and note which example it is.
 - (d) It was OK for Babur to ask Alice that on a homework assignment, but it would not be OK on a take-home exam.
5. (*continued*) Babur says he can't see how to make the textbook example fit the problem, so Alice shows him how she answered problem x . True or false:
- (a) Babur's write-up should state that he got help from Alice.
 - (b) Babur's write-up for problem x can follow Alice's exactly, provided he says that he got help from her.
 - (c) Babur does not need to acknowledge any help, if his solution doesn't have exactly the same wording as Alice's. For instance, Babur should re-name all the variables in the code, and do a word-for-word paraphrase of Alice's text.
 - (d) Babur can follow Alice's write-up as closely as in the previous answer, provided he acknowledges getting help from Alice.
 - (e) Babur should acknowledge getting help from Alice, and should use the same ideas to write his own answer, using his own words and code, rather than starting from Alice's exact answer and modifying it.
 - (f) It was OK for Babur to ask Alice that on a homework assignment, but it would not be OK on a take-home exam.
6. Alice cannot remember the formula for the density of a standard Gaussian distribution. She consults a resource which reminds her that the answer is $\frac{1}{\sqrt{2\pi}}e^{-x^2/2}$. True or false:
- (a) Alice needs to report her source, no matter what it is.
 - (b) Alice needs to report her source if it was not a previous class (e.g., if it was an online resource or a classmate).
 - (c) Alice needs to report her source if she cannot find this fact in the textbook for 402.
 - (d) Alice does not need to report any source, because this fact is common knowledge by this point in her statistical education.
7. Dolores and Eric work separately on the homework each week, but the morning before it's due, they meet to see if they've gotten matching answers. If their answers don't agree, they argue it out until they feel they know who was right, and then update their work. True or false:

- (a) Dolores and Eric are collaborating by sharing work.
 - (b) If Dolores changed his work to match Eric's answer, Dolores should report working with Eric, but Eric doesn't have to.
 - (c) If their initial answers agree so they don't change anything, this isn't working together and they don't have to report it.
8. Babur has access to a large language model (like ChatGPT) and decides to see how it can help him with 402. (After all, some LLMs advertise having an "Advanced Data Analysis" capability.) Which of the following uses are allowed in this course?
- (a) Giving the LLM the complete text of the homework assignment and asking it to write answers to all the questions.
 - (b) Giving the LLM the complete text of the homework assignment and asking it to write a *first draft* of answers to all the questions, which Babur then checks for accuracy.
 - (c) Giving the LLM the text of the homework questions one by one, asking it for first drafts one at a time, and revising them one by one.
 - (d) Paraphrasing the text of a homework question and asking it for just the necessary code.