

Math 115F: Cryptography, Fall 2010
Essay #3 – Big Questions Paper

For your final assignment, you'll be asked to focus on "big questions" about the ways in which cryptography has impacted history, culture, and/or technology. Whereas the expository paper focused on clear explanations, this paper focuses on analysis, evaluation, and critical thinking. You should pose a "big question" about the role of cryptography in human affairs, suggest an answer to the question, and provide evidence for your answer.

This is your opportunity to spend time thinking critically about one of the many "big questions" we have raised in the course, one you find particularly interesting, provocative, or relevant. It's also your opportunity to show how your writing has improved this semester. In this paper, you'll draw on the argumentation and explanatory skills you used in the first two papers, adding to that mix your research skills. While you didn't need to support your arguments in the first paper with sources, in this paper you'll be expected to do so.

The assignment will take the form of a paper about 10 pages long (typed in 11 or 12 point font, double-spaced) with appropriate references and citations. Your paper will be graded on the strength and clarity of your evidence-based arguments. See the rubric for this assignment for more details on my expectations.

A first draft of your paper is due in class on Tuesday, December 7th. Bring a paper copy, since you'll spend that class session providing feedback on each other's papers. Failure to do so will reduce your grade on this assignment by two letter grades.

Your big questions paper will contribute 30% of your overall course grade. The final draft, as an email attachment, please, is due by noon on **Tuesday, December 14th**.

SELECTING A BIG QUESTION

Your first step is to select a question to address in your paper. Think back over the readings and class discussions for ideas. Some of the pre-class reading questions would work well as questions to address. If you would like to run ideas for a "big question" by me for my feedback, I'm glad to provide it.

When selecting your question, keep in mind that your goal in this paper is suggest an answer to the question and then draw upon the various examples, stories, discussions, and resources shared in this course (from the readings, class discussions, the Delicious feed, your classmates' expository papers, the class timeline) to build a case for your answer. The question you select should be on some level controversial. That is, there should be more than one defensible answer to your question. Your job is to argue for your answer to the question, anticipate how others might argue for other answers or against your answer, and provide evidence to rebut those arguments. So look for a question where you can imagine others taking different positions from your own. If there is only one sensible answer to a question, then the question isn't "big" enough.

CITING YOUR SOURCES

You must cite your sources appropriately, and a list of references must appear at the end of your paper or embedded in your video. It does not matter which formatting style you use (APA, MLA, etc.), but you

should be consistent in your formatting. Be sure to format your citations (footnotes, endnotes, etc.) correctly according to the formatting style you choose. For guidelines on documenting sources, avoiding plagiarism, and other relevant writing topics, please see the Vanderbilt Writing Studio's [list of resources for students](#).

Make clear what references you use and how you use them. Did most of your project come from a single journal article? If so, then there is no need to cite it repeatedly, but you should explain your use of the article clearly in your project and cite direct quotations from the article. Did your project come from a variety of sources? Make it clear what ideas (facts, computations, analysis, etc.) came from which sources through proper citations. That is the spirit of not plagiarizing—making it clear where you obtained your ideas. The Vanderbilt Undergraduate Honor Council's "[What Is Plagiarism?](#)" page is another very useful source of information on how to quote and cite your sources.