

**Final Review**  
**CMSC 350**  
**Fall 2015**

Name: \_\_\_\_\_

This exam consists of four essay questions. Answer each question fully and completely using proper English grammar. Your answers should be detailed and specific. A correct answer will probably require at least two to three paragraphs to answer.

Some questions have multiple parts. Be sure to read the question carefully and respond to all of them!

**Question 1:**

Deontology is an ethical theory that says that actions are inherently right or wrong in and of themselves. In class, we have discussed two different deontological theories: natural law and divine command. Explain both of these theories and give an example which illustrates how they differ.

**Question 2:**

Consider the following scenario (based on a true story, by the way, which I first heard from Dr. Wears):

An eccentric mathematician has published a proof that claims to solve one of the most famous problems in Topology. His proof has been submitted to the most prestigious journals in Mathematics and the brightest minds in the field agree that it successfully solves the problem. He has been offered millions of dollars in prize money, which he has turned down. Unfortunately, his proof is written in a very cryptic and esoteric notation which almost nobody can read. Another mathematician submits a version of this proof which fixes the notation and makes it more accessible. The new proof is clearly correct, but also clearly derived directly from the first mathematician's proof.

The second mathematician claims that his version of the proof should be recognized as an independent mathematical contribution because it fixes errors in the notation of the solution. The editors of the Annals of Mathematics have to make a decision about whether to publish the new proof and, if so, whether to award it any prize money. The first Mathematician has abandoned Mathematics and lives in his mother's apartment supporting himself only by the money he makes as a tour guide.

What ethical issues arise from this scenario? Be detailed. Tell both what the critical issues are and why they matter from an ethical standpoint. Make sure you identify -all- of the ethical issues and consider it from the viewpoint of all the different actors involved.

**Question 3:**

Describe a scenario in which a typical Longwood student might face a decision about intellectual property and show how it can be analyzed using what we have learned in class.

**Question 4:**

Consider the following ethical dilemma:

Suppose your roommate leaves their computer logged in with Facebook open. You know that they are having some relationship problems and that they have been using Facebook Messenger to try to work things out. You are very close to your roommate and care a lot about their happiness. You know your roommate has a history of depression and you are concerned that this situation could push them over the edge.

If you open up their chat history, you might learn something that will allow you to give better advice or decide whether to ask the counseling center for professional intervention. You are pretty certain that you can hide your tracks so that your roommate will never know you read their messages.

Should you read through your roommate's chats? What are the possible consequences of the different choices you could make?