## Mathematics Graduate Program Statement on Academic Integrity Fall 2019

As you earn a math degree, you acquire specialized knowledge and skills as well as the responsibility to meet the highest ethical standards when you apply what you have learned. For example, when you propose a mathematical model, you and those who may use the model share responsibility for making good-faith efforts to understand and disclose the model's limitations. This century's devastating financial crisis was in part due to widespread failure to accept that responsibility.

As a student you will have frequent opportunities to show that you are worthy of the trust that is the foundation of a healthy professional culture. Can others count on you to consider the merits of their suggestions respectfully and to acknowledge the value of their contributions openly? Can others trust your assertions or understand how to check them, based on the explanations and/or source attributions you provide?

The value of your education will depend in part on the honor with which you approach learning. Because the ability to ask insightful questions and the ability to formulate clear explanations are crucial to making sense of complex concepts and the relationships among these concepts, many teachers encourage course-related and research-related conversations among students; but these conversations, to be effective, must meet certain standards of academic integrity. When a student simply repeats the explanation given by another student, those standards have not been met. An exchange between students where "*How should I do this problem*?" is met with "*Here's how*." clearly fails to meet those standards. One measure of whether a conversation is appropriate is the extent to which the participants practice asking insightful questions and offering clear explanations throughout the conversation.

Virginia Tech's honor expectations are expressed in a hierarchy of documents, from the university-level <u>Virginia Tech Graduate Honor System</u> and <u>Virginia Tech Honor Code</u> down through this department-level document to the more narrowly applicable course policy statements and instructions on specific assignments. An activity prohibited by any of these documents is prohibited except where it is explicitly permitted by a more narrowly applicable document. Sometimes right and wrong are separated by a bright line. "*While working on a test, you may consult no other person or source.*" permits no exceptions. Sometimes the ethical implications of various choices come in shades of gray. When does a conversation motivated by a homework assignment cross the line between usually-acceptable collaborative exploration of challenging content and usually-unacceptable answer-transfer from one student to another? Even where there is no bright line, there is a clear expectation that members of the Virginia Tech community will seriously and continually reflect on ethical issues arising in their work and studies. Acknowledging that effective reflection requires experience considering a range of perspectives, Math Department faculty members welcome conversations with students about ethical standards. If you are uncertain about an honor expectation, ask!

Unless a faculty member explicitly states a different policy, the rules on the next page apply to all work submitted in your graduate Math classes.

- 1. You are free to discuss general ideas about projects and homework problems with other students. *You may not show a completed solution to another classmate, nor may you view theirs.*
- 2. The work you turn in must be your own write-up: you may not just copy solutions from another student, even if you worked together to understand the underlying ideas, concepts, or proofs.
- 3. The use of solutions or assignments from prior sections of the class (or similar classes at other institutions, GitHub, Stack Overflow, rent-a-coder sites, etc.) is *strictly prohibited*, regardless of how they are obtained.
- 4. Be sure to clean up your public workspace when you are done: for example, erase the whiteboards and do not leave code print-outs or notes behind in the Math Commons.
- 5. You are free to discuss *general ideas* about computer programming, algorithms, and debugging strategies at a *conceptual level* with other students. However there is significant value in practicing the art of translating mathematical concepts into functioning computer code. Employers actively seek out mathematicians who can design, test, debug, and deliver mathematical codes. Do not deprive yourself or other students of the opportunity to develop, debug, and test software.

You may not share source code and scripts, including LaTeX code. Copying from a screenshot, a photo of a screen, a print-out, or by any other mechanism, electronic or otherwise, is prohibited. You cannot provide such materials to students in classes you have already taken, unless you are serving in an official capacity as a Graduate Teaching Assistant.

- 6. You may not post solutions (or any other course material) online, outside of Canvas. Sharing any course materials on third party "study resource" sites is strictly prohibited.
- You are expected to report any violations of the <u>Virginia Tech Graduate Honor System</u> or the <u>Virginia Tech Honor Code</u> or this policy or course-specific honor policies to the course instructor, or your academic advisor, or the Math Graduate Program Chair, or the Math Department Chair.

If you are uncertain or concerned that a behavior might be a violation of the Honor Code, ask your instructor for clarification.

If you are uncertain about an honor expectation, seek advice from the Math faculty!