

# Teaching Ethics in the Math Classroom

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## TEACHING ETHICS IN THE MATH CLASSROOM

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External resources are useful and sometimes necessary in the field of mathematics. However, the line between using external assistance and submitting work that is not one's own can get blurred. In the Mathematics Department at FLC, we instill ethics in assignment submissions. We do this through a variety of methods that assess student learning. Our assessments are tiered in use of external resources as aids. This tiered system works so that students can work towards submitting work that is entirely their own and not a direct copy of someone else's. The end goal is mastery of the subject without use of aids (external computing systems, assistance from instructors or peers). The use of this departmental policy as a framework is implemented in the 100 and 200 level math classes.

Online homework is the first opportunity for students to practice and learn material. Students are allowed to seek assistance from peers, tutors or instructors to complete their assignments. Students are encouraged to do their own work as much as possible. Homework is an assessment that enables them to practice the concepts and material presented in class, and which they will be expected to recreate on higher-stakes assessments.

The first set of formal assessments are quizzes, a low-stakes opportunity for students to demonstrate mastery of the subject. Students must work on their own to complete these. They are not permitted to use any resources while taking a quiz. Written feedback is provided so that students have an opportunity to demonstrate what they know well on their own, and what they need to work on to be prepared for the exam.

Mid-term exams are the second set of formal assessments. As with quizzes, students must work entirely on their own. We emphasize that mid-term exams are high stakes assessments where the students must demonstrate their learning. It is in this setting that students must demonstrate self-sufficient mastery of the concept.

We will present student data showing how these tiered assignments work in facilitating student learning and align with the ethical standards of the discipline.