

A Gateway Quiz is an educational assessment tool used when there are one or more topics in a course that the instructor has deemed are core topics. That is, topics that must be learned in order to receive credit for the course, where the instructor feels that if the topic is not mastered at some minimum level, the student should not receive credit for the course - regardless of what the individual assignment or test grades are. The concept behind Gateway Quizzes includes the idea of mastery learning. What this means for you is that you will have multiple attempts to take each quiz, since the goal is that you master the material by the end of the semester, not that you master it on the first attempt.

For Math 310, the “core topic” is the ability to write a proof. As such, there will be four Gateway Quizzes in this course (on negating quantified statements, general proofs, set containment proofs, and mathematical induction).

The more specific details are below.

- (a) Each Gateway Quiz will have two problems at 15 points each, for a raw score of up to 30 points.
- (b) The first attempt for each Gateway will be in class. All later attempts must be in my office, either during office hours or by appointment.
- (c) A passing grade on a Gateway Quiz will be a raw score of at least 24/30 (or 80%).
- (d) The recorded scaled score for a *passed* Gateway will be determined by attempt number.

First attempt	10 points
Second attempt	9 points
Third attempt	8 points
Fourth attempt	7 points
Fifth attempt	6 points
Sixth or later attempt	5 points
- (e) All attempts on Gateways must be completed by 5:00 pm on Study Day (Wed., Dec. 18, 2013).
- (f) No more than three attempts on Gateway Quizzes will be given on the same day (regardless of which Gateway they are).
- (g) No two attempts on the same Gateway will be given without at least a 30 minute break in between. (This is to allow a reasonable time for grading and for studying forgotten details.)
- (h) Each Gateway will count as 4% of the final course grade.
- (i) For each Gateway Quiz that is not passed, the final course grade will be reduced by 5% *in addition to receiving a zero on each Gateway Quiz that is not passed.*
- (j) In order to pass the course, you must either pass each Gateway Quiz or make at least three significant attempts on each Gateway not passed. The definition of a “significant attempt” is earning a raw score of at least 12/30.
- (k) Failure to either pass or have three significant attempts on any single Gateway Quiz will mean an F grade for the course as a whole *regardless of your overall numerical average.*

Remember, the idea here is to master the material, not punishment. You can have multiple retakes, and I would write ten or more versions of each quiz if necessary. There is an incentive to pass each Gateway early, however. Note that *each* Gateway is 4% of the overall course grade, so all four taken together will be 16%, which is more than the final exam. Note that these topics will also be covered on the exams, the final, and in the homework assignments.