

HOW TO REDESIGN A COLLEGE-LEVEL OR DEVELOPMENTAL MATH COURSE USING THE EMPORIUM MODEL

V. How to Make Course Policy Decisions

Prior to the pilot term, you need to develop a number of policies and procedures in order to implement the Emporium Model consistently. The following questions are frequently asked by teams working on a new redesign; the answers have been collected from those who have successfully implemented and sustained a math emporium. Some questions have definite answers; that is, there is consensus among all successful redesigners. Other questions do not have specific answers. You will need to make certain decisions within your own institution. In the latter case, to help you make those decisions, we have provided examples of options that other institutions have chosen. For some questions, the same answer applies to both the flexible and the fixed attendance versions of the Emporium Model. For others, the answers are different. The various versions of the Emporium Model are described in Chapter I.

Q: What assignment setting is best for homework and quizzes?

A: Homework should be open from the beginning of the semester with unlimited attempts prior to the due dates. Feedback should be immediate with the opportunity to rework an exercise until mastery. Mastery levels can be set before students are allowed to move on to the next homework assignment. Students should use all tutorial resources available to them for homework.

Quizzes should be set so that no tutorials and no feedback are allowed until submission. Remember that quizzes are preparation for tests. Students should be given many attempts to retake quizzes. Questions on quizzes should be pooled so that additional attempts allow students to see a range of questions or problems within one objective. Students should not be able to go back and rework individual items on a quiz to improve their grades. Often quizzes are timed to give students a more realistic sense of the upcoming test situation. The best score should be the one kept so as to encourage students to continue taking a quiz to improve their grade or just to get additional practice with no penalty.

Q: How many attempts should students be allowed on quizzes, tests and final exams?

A: There are no right or wrong answers to what NCAT calls the "how many" questions. Multiple testing opportunities are a must if mastery is required, and a plan should be in place to require time to pass for students to re-prepare for a retake. For example, after making two attempts without success, the student should be required to meet with an instructor to review errors prior to attempting the test a third time. Here are some examples of decisions that other institutions have made:

	College #1	College #2	College #3	College #4	College #5	College #6
Quizzes	6	NA	Unlimited	10	2	10
Module						
Tests	3	10	3	2	1	3
Final Exam	3	10	NA	1	1	1

Q: What percentages of course points should be awarded for each course component?

	College #1	College #2	College #3	College #4	College #5	College #6
Participation	5%	10%	5%	10%	7.2%	6%
Homework	20%	30%	15%	10%	6.8%	11%
Notebooks	NA	NA	10%	NA	NA	6%
Quizzes	15%	NA	NA	10%	16%	11%
Module Tests	45%	50%	70%	45%	40%	48%
Mid-Term	NA	5%	NA	NA	NA	NA
Final Exam	15%	5%	NA	25%	30%	18%

A: There are no right or wrong answers to what NCAT calls the *how many* questions. Following are examples of decisions that other institutions have made:

Q: Should partial credit be awarded on tests and/or exams?

A: There are differences of opinion as to what constitutes an appropriate policy. Some institutions believe that the correct answer is important and that students should be granted credit for the problem only if they have arrived at the correct solution. Other faculty contend that part of what a student is learning involves the process of thinking through the problem, setting it up correctly and then doing the calculations. Thus, a student who shows understanding of the process, even though making an error in calculating the answer, should receive partial credit.

If partial credit is to be granted, there needs to be a clear rubric for assigning that credit, so that everyone is treated fairly and partial credit is awarded consistently. Granting partial credit may require that either the problem be identified in pre-set steps (so that the software can grade it) or that the problem be hand-graded. Hand grading is time-consuming, especially for large sections. Some institutions formulate one section of each test (usually about 30 percent) to require that students solve problems and show their work; that section is then hand graded and given partial credit. The remainder of the test is taken online, and only correct answers receive full credit. Whether or not to grant partial credit and under what circumstances are decisions that the faculty need to discuss, arrive at, and apply consistently for all students.

<u>Testing</u>

Q: How should we handle testing?

A: Tests and final exams should be taken in a proctored environment: a segregated section of the lab, a computer classroom or a college testing center, when available. Keep students who are taking tests segregated from those who are working on homework and other assignments. This allows those proctoring the testing students to know who is actually taking a test. Provide scratch paper for students by using varied color paper, pick up the scratch paper as students leave, and shred it after the testing window closes. Students should be allowed to take their tests before the deadline as long as a test proctor is present so that they can proceed through the course at a faster rate.