



## Henderson Community College Title III

# Coaching for Student Success

## Mathematics Pilot Classes for Fall 2005

*By Maura Corley and Mary Jobe*—During summer 2005, the mathematics faculty at HCC worked under a Title III grant to develop pilot classes for the developmental math courses, MT 055 Pre-Algebra and MT 065 Basic Algebra with Measurement.

First an overall plan was developed on how to conduct the pilot classes. Searching the Internet, attending a one-day conference on developmental mathematics and engaging in many discussions among the math faculty were the initial activities. Among effective practices learned about in the process were: mandatory assessment and placement, student accountability, management of expectations, maintaining high standards, a high level of student support, and offering a variety of delivery formats. With these we also included mandatory attendance since it is already a policy for the

developmental math classes at HCC.

Next we had to select new textbooks. The choices were relatively few because we were restricting ourselves to those that were “enhanced,” meaning that electronic resources for students were available for these texts. Finally in July, the decision was made to go with an Addison-Wesley’s series using a versatile software program called MathXL. The ladies at the bookstore were really happy that we finally chose our texts at least two weeks before the end of summer term!

Pilot classes for MT 055 and MT 065 were implemented this fall semester with Maura Corley teaching a section of MT 055 and Mary Jobe a section of MT 065. An outline comparing the courses as they are taught in the traditional and pilot classes follows.

### Welcome Rebecca!

We are happy to announce that Rebecca Emerson has joined our team as the new Advising Coach. We look forward to working with Rebecca and hope that all of you will welcome her to Henderson Community College!

Visit the Title III website for information, resources, and upcoming learning opportunities.

[www.hencc.kctcs.edu/title3](http://www.hencc.kctcs.edu/title3)

Traditional Approach	Pilot Approach
Primary instruction mode is lecture and using the blackboard.	Incorporating PowerPoint and Smartboard into lectures.
Each class consists of covering new material and also discussing previous homework assignments as needed; occasionally time in class is given for students to work individually or in groups on homework and to get help if needed.	Workbook text is used in class along with the PowerPoint presentation in an effort to increase student participation.
Homework is assigned from the textbook and is collected, graded and returned periodically (some weekly, some less often); homework counts as equivalent to one test grade or 100 points.	Homework is completed on the computer using MathXL—a homework, tutorial, testing software program provided with our textbooks. A grade of 100% is required on each homework lesson in order for the student to move on to the next section; students have many sources available for feedback or help through MathXL.
Students are given five chapter tests, with no chances for retakes; partial credit is allowed.	Seven tests are required, covering less material and taking less time. The tests are taken through MathXL and are graded for accuracy, either right or wrong with no partial credit.

Traditional Approach	Pilot Approach
	Online testing provides immediate feedback on the test grades; students are required to do an error analysis of each test.
70% average is required for passing the course.	80% is required for passing each test. We work individually with students who do not make 80%; then they are allowed to retake the test within one week of the original test date.  80% average is required for passing the course (tests, vocabulary quizzes, and homework grade combined).
	Passing seven competency quizzes over the major topic areas that have been identified as needed for success in follow-up math courses is required. Some tests may be passed with a grade of 80%; others may be passed with a grade of 100%. Passing all of these seven tests is required, but students are given an unlimited number of attempts (with a bonus point awarded if they pass on the first or second try).
	Vocabulary quizzes are included for some tests with a total of five overall.
Attendance is mandatory.	Attendance is still mandatory.

The following are a few observations we have made from our pilot class experience so far. The MathXL software apparently works pretty well, and it is definitely convenient to the teachers. However, we fear that the students may not be writing out all the steps in working the problems. Since their results are entered on the computer, we have nothing to view except the actual answers, and we are concerned that many of the students are not developing good problem-solving, detail-step-writing habits.

The PowerPoint lectures seem to be well-received, but

they have been time-consuming to produce for each day's lesson. Use of the Smartboard is very handy too, but it has its own limitations—like not working on occasion or just being hard to reach.

To this point we are not sure which aspects of the pilot approach will be kept and which will be altered for the spring semester. We do plan to administer a detailed survey for the pilot classes to solicit the students' opinions about the various components being used. The information collected will be considered as we plan for next semester.

## Title III Team

**Kim Conley**  
Project Director  
x19696  
kim.conley@kctcs.edu

**Doris Cherry**  
Activity Director  
x19771  
doris.cherry@kctcs.edu

**Rebecca Emerson, LPCA**  
Advising Coach  
x19828  
rebecca.emerson@kctcs.edu

**Sarah Thomas**  
Learning Specialist  
x19829  
sarah.thomas@kctcs.edu

**Tracy Sword**  
Administrative Assistant  
x19693  
tracy.sword@kctcs.edu