

Product Used **MyMathLab**
 Course Name **Intermediate Algebra**
 Credit Hours **Three**



KEY TAKE-AWAY

MyMathLab’s multimedia features enable students to access help before they fall behind. ITCC’s use of the program promotes perseverance, supplements class content in a variety of learning styles, and facilitates communication with the instructor outside of class time.

Textbook in Use

Intermediate Algebra, 5e, John Tobey, Jeffrey Slater

Course Implementation

Course Design

Intermediate Algebra is offered on-site and at extension sites. Classes meet once or twice a week, face-to-face, for a total of three hours a week. In fall 2007, Ivy Tech’s mathematics department adopted MyMathLab for use by all intermediate algebra courses.

Students take review exams prior to each of the four exams, through which they can earn an additional 5 percent.

Use of MyMathLab

MyMathLab is used in every intermediate algebra course to assign and complete required homework and to create and complete chapter quizzes. Students have two weeks to complete weekly homework assignments. They are afforded unlimited attempts until the due date to earn 100 percent. Quizzes are timed (20 minutes), and students are afforded attempts to successfully complete them.

Assessments

- Homework 10 percent
- Quizzes 10 percent
- Tests (three) 20 percent each (*in class, paper and pencil*)
- Final exam 20 percent (*in class, paper and pencil*)

Use of MyMathLab contributes 20 percent to a student’s final course grade.

Results and Data

Prior to adoption of MyMathLab, math was viewed as a “hard” subject, and retention in some classes was as low as 50 percent. Students had no means to receive help in context, and frustration levels—and dropout rates—were high.

Data collected from fall 2007, the first semester in which MyMathLab was implemented, through fall 2009 illustrates both consistent and significant improvements in student success and retention.

	Percentage of As	Percentage of Bs	Percentage of Cs	Percentage of Ds	Percentage of Fs	Percentage of F Students Who Did Not Take Final	Retention Rate
Fall 2009	12.6%	19.0%	28.3%	24.6%	15.4%	62.0%	90.5%
Spring 2009	15.7%	22.2%	25.2%	20.0%	16.9%	63.6%	89.2%
Fall 2008	14.0%	19.5%	24.1%	16.9%	25.3%	64.8%	83.6%
Spring 2008	14.0%	18.5%	21.3%	18.5%	27.6%	68.5%	81.1%
Fall 2007	18.0%	21.6%	19.9%	13.0%	27.4%	70.8%	80.6%

Table 1. Intermediate Algebra Final Grades and Retention Rates from Initial MyMathLab Adoption in Fall 2007 through Fall 2009

Use of MyMathLab keeps my students involved in the class. Retention rates have increased significantly.

*—Abdalla Hazaimah, Ph.D., Chair, Math and Physical Science
Ivy Tech Community College*

Of particular note are the following statistics:

- The percentage of students earning Cs has increased by 42 percent.
- The percentage of students failing the course has decreased by 44 percent.
- The retention rate has increased by 12.5 percent.

The Student Experience

Use of MyMathLab promotes student engagement and, most important, perseverance. According to Abdalla Hazaimah, chair, math and physical science, his students are both more involved in the class and more prepared—thanks to the increased time on task they experience by completing required homework—and therefore are less likely to drop out.

Hazaimah also points to MyMathLab’s interactive nature and multimedia features as vital contributors to his students’ increased success.

- MyMathLab’s Ask My Instructor feature enables students to receive help before they reach a level of frustration and stop attending class. It promotes communication between instructor and student that is unencumbered by the embarrassment or intimidation many students feel in the classroom.
- Help Me Solve This—together with MyMathLab’s wealth of online videos, tutorials, and other practice aids—supplement what students hear in lecture with the type of assistance that suits their learning styles. Students who must miss a class are able to watch video clips of the content, whereas in the past, those students would likely fall behind and ultimately give up.
- Using the tracking and reporting features found in MyMathLab’s Gradebook, Hazaimah tracks his students’ progress. He can see what concepts they are struggling with, and he can intervene long before the concepts show up—and potentially penalize the student—on an exam.

Conclusions

The significant student success rates experienced in Intermediate Algebra have promoted the implementation of MyMathLab in all but one Ivy Tech mathematics course. As an enthusiastic advocate for technology in learning, Hazaimah is thrilled with the difference it has made. “When I first came on board in 2007, we didn’t have any math majors,” he says. “Today we have 15.”

The inclusion of math majors is just one of many signs that the department’s culture is changing. “The lines of communication between students and instructors are more comfortable and open now,” says Hazaimah. “Instructors are experiencing firsthand how technology can increase their students’ success, plus make teaching itself more interesting and more fun.”

Hazaimah looks forward to next semester, when he will replace Intermediate Algebra with a new MyMathLab-enabled course, Concepts in Mathematics. “The course includes critical thinking, theory, and financial concepts that satisfy the needs of a broader range of majors,” he says. “I also hope to collect a wider range of data not just from my campus but also from Ivy Tech campuses around the state.”

The success he’s experienced in just three years encourages Hazaimah to continue delving further into the program. “It’s better than anything else I have seen in my 16 years of teaching,” he says. “I really enjoy it.”

*Submitted by Abdalla Hazaimah, Ph.D., Chair, Math and Physical Science
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