

Product Used **MyMathLab**
 Course Name **Essential Mathematics**
 Credit Hours **Three**



KEY TAKE-AWAY

Repeated student success plus significant student buy-in of the program's unlimited practice opportunities and anytime/anywhere access convinced Algonquin administration to upgrade its use of MyMathLab from optional in one section to required in all Essential Math sections.

Textbook in Use

Basic Technical Mathematics with Calculus SI Version, 9e, Allyn J. Washington

Course Implementation

Course Design

This traditional 15-week precalculus, multidiscipline course meets three hours per week in the form of one 2-hour lecture followed by a 1-hour math workshop in which work on sample problems reinforces the lecture material.

Outside of class, students complete MyMathLab homework and a MyMathLab quiz for each chapter covered in the course syllabus.

Program eligibility requirements for Algonquin College's three-year technology programs traditionally include Mathematics, Grade 12 MCT4C (or Grade 11 MCR3U) or equivalent. However, applicants with a Grade 12 MAP4C (or Grade 11 MCF3M) score of at least 60 percent are conditionally accepted with the provision that they take additional preparatory mathematics as part of their program of study.

Assessments

For students who meet the program's traditional eligibility requirements, the grading policy is as follows:

10 percent	Quizzes <i>One per chapter, taken in MyMathLab</i>
20 percent	Paper-based assignments
40 percent	Paper-based term tests and quizzes
30 percent	Paper-based final exam

Conditionally accepted students attend a five-hour-per-week version of the course, which consists of three hours of lecture and a two-hour math workshop, in which a combination of paper-based exercises and MyMathLab exercises is administered. For these students, the grading policy is as follows:

5 percent	Paper-based, in-class exercises
5 percent	Quizzes <i>One per chapter, taken in MyMathLab</i>
20 percent	Paper-based assignments
40 percent	Paper-based term tests and quizzes
30 percent	Paper-based final exam

Note: The final exam is the same in both versions of the course.

Use of MyMathLab

In addition to required MyMathLab quizzes, students are afforded the breadth of MyMathLab's learning features, including Help Me Solve This, View an Example, Instructor Tip, Calculator, and the Study Plan.

Starting in fall 2010, MyMathLab's Coordinator Course feature will be employed to ensure consistent content and assessment integrity across multiple course sections, which are taught by a combination of full- and part-time instructors. The Coordinator Course will be configured with prepopulated quizzes organized by textbook chapter.

Use of MyMathLab contributes 5 to 10 percent to a student's final course grade.

Assignments created within MyMathLab provide students with a rich learning and testing environment in which students can immediately obtain online assistance to enhance their learning.

—David Haley, Mathematics Professor
Algonquin College

Results and Data

In fall 2008, MyMathLab was introduced as an optional component in one section of Essential Mathematics. The results were promising: 49 percent of the students used MyMathLab homework and quizzes, which were counted as a 4 percent bonus to their final grades. The overall student success rate for the course section was 77 percent ($n=89$, $N=373$).

In response to the product's high student-acceptance level, MyMathLab was introduced as a required component of all fall 2009 sections of Essential Mathematics. Although usage statistics were not collected for that semester, there was an

observable increase in student success rates from the pilot course section to follow-on deliveries in the same course section: 78 percent success rate ($n=42$, $N=317$). The repeated positive student success, combined with the experience of faculty and students themselves, resulted in the decision to not only maintain use of MyMathLab in all Essential Mathematics sections but also to expand its implementation to include standardized Coordinator Courses in fall 2010.

The Student Experience

According to David Haley, mathematics professor, "One of the strengths of MyMathLab is its many learning aids. Students have the opportunity to learn and to practice mathematical principles while being tested and can obtain immediate assistance if they have trouble."

MyMathLab's interactive and engaging learning environment supports the "anywhere, anytime, anyplace" learning philosophy of the college's 2008 strategic plan. "Students have demonstrated a very enthusiastic buy-in of MyMathLab," says Haley. "While they may not require the extra online assistance all the time, knowing that it is available for use when needed positively contributes to their learning experience."

Algonquin students know that the key to learning math is doing math, and they recognize the ways that MyMathLab helps them do just that. "I'd say the biggest advantages of MyMathLab are its huge database of practice questions and that it provides correct answers immediately," says an Essential Mathematics student. "I can practice problems over and over again until I'm comfortable with the content. This helps decrease my anxiety, and I end up getting better grades as a result."

Conclusions

"MyMathLab's anywhere/anytime convenience, its wealth of learning aids, and its immediate feedback not only promote increased student learning but also build students' confidence in their ability to succeed in this math course and beyond," says Haley.

Future plans include the use of member courses copied from a prepopulated Coordinator Course to promote the consistency of the learning and testing environment.

Submitted by David Haley, Mathematics Professor
School of Advanced Technology, Algonquin College