

Gateway Courses Redesigned

The redesign of gateway courses at DePaul has grown out of an effort to help students succeed in introductory courses that have historically proven difficult for large numbers of students. While individual students always have been able to get extra help from their instructors and from tutors, this initiative looks systemically at the structure of the courses themselves. Rather than focusing solely on what material needs to be “covered” in a particular course, faculty involved in course redesign ask what approaches will help students learn more effectively. Often, course redesign makes use of technology to provide students with greater opportunities to practice course concepts.

Two examples of where course redesign has taken hold most firmly is in Introduction to College Algebra and Introduction to Accounting I.

Introduction to College Algebra

A team of faculty members in DePaul’s Department of Mathematics redesigned its Introduction to College Algebra course. Course syllabi have been standardized and class time is now divided between traditional lecture and lab time where students use MyMathLab software to complete practice problems online and receive individual attention from the instructor. MyMathLab provides a set of course materials, featuring free-response exercises that are algorithmically generated for unlimited practice and mastery. Students also can use online tools, such as video lectures, animations and a multimedia textbook, to independently improve their understanding and performance. Instructors can use MyMathLab’s homework and test managers to select and assign online exercises correlated directly to the textbook. Instructors also can add offline (paper-and-pencil) grades to the grade book.

The redesign enhances course quality and improves learning outcomes by requiring students to spend more time practicing the math concepts they are learning and enabling them to receive automatic feedback regarding their progress.

Introduction to Accounting I

As of fall 2008, all students taking ACC 101: Introduction to Accounting I are required to take a non-credit lab that meets for 50 minutes once a week during the quarter. The School of Accountancy and Management Information Systems made the lab a requirement after finding that students who participated in a voluntary lab that had been offered for the past few years performed better—sometimes as much as half a letter grade better—than those who did not attend.

The lab format involves students working in teams to complete assignments that reflect the chapter that was covered by the instructor the previous week. The assignments consist of multiple-choice questions and short-answer problems and reflect the content necessary to perform well on midterm and final exams. To make it possible to run meaningful labs with teamwork, labs are capped at about 20 students.

As part of implementing the required lab, ACC 101 instructors now have common learning objectives, textbooks and topical coverage—a necessary step to create lab assignments based on students learning the same material at the same pace. In addition, an instructor from the School of Accountancy and Management Information Systems coordinates the class sections and lab sections as well as oversees graduate assistants who facilitate the labs.