

## **What is MathExcel?**

MathExcel is an innovative, award-winning program designed to give selected students, who are intelligent and hard-working but who want an extra boost in calculus, the best possible chance to succeed in Math 112. It is an "honors"-type program with an emphasis on working hard and smart in a supportive and friendly environment. MathExcel is more effective and efficient than studying alone or watching a TA solve the problem for you at the board.

## **How is MathExcel setup at BYU?**

In fall 2006 the BYU Department of Mathematics will offer 2 optional sections of MathExcel as a 1-credit pass/fail course for students who are also enrolled in Math 112. One section of MathExcel will meet TTh 2:00-3:50pm and the other will meet MW 3:00-4:50pm. Each section has space for only 25 students out of the over 2500 students who are enrolled in Math 112, so apply early.

MathExcel students will enroll in a standard Math 112 calculus course. They will attend the standard Math 112 lectures on MWF, will do the same Math 112 homework, will take the same Math 112 exams, and will be graded in the same way as the other students in Math 112. However, they will be excused from attending the standard Math 112 one-hour recitations on Tues and Thurs., and instead they will be enrolled in one of the Math 391R sections and attend that class. During the MathExcel class, there will be no lectures. Instead students will work collaboratively in small groups on specially designed problems that are more challenging than the assigned homework. When a group has difficulties, the TA will serve as a guide in a Socratic role instead of simply giving answers. We agree with Mike Freeman that, "The students learn from each other, achieving solutions mainly through their own efforts. Understanding gained this way is deeper and lasts longer." The atmosphere is congenial, supportive, and personal, developing a sense of community and friendship. The extra time working on harder problems will help you succeed in Math 112.

## **Who should take MathExcel?**

At other universities, MathExcel has been tremendously successful in helping women, minorities, and students from small high schools succeed in calculus. At BYU, MathExcel will be geared toward these students, recently returned missionaries, and other capable, hard-working students.

## **Why should I take MathExcel?**

Because if you are willing to work hard, it will help you succeed in calculus. MathExcel has been a tremendously successful program, especially in helping women, students from small high schools, and minorities succeed in calculus. For several years MathExcel has been offered at the Univ. of Kentucky. During this time, the average final grades for course were 0.4 to 1.1 higher for MathExcel students than for the regular students (using the scale A=4.0, B=3.0, etc.). MathExcel students earned almost twice as many A's and B's as regular students did. For more information about these results visit <http://www.ms.uky.edu/freeman/mathexcel.html>

## **Interested in BYU's MathExcel?**

Contact Michael Dorff at 422-1752 or [mdorff@math.byu.edu](mailto:mdorff@math.byu.edu)