MATHEMATICS 2090
MATHEMATICS OF FINANCE

Your credit card company charges you 1.5% per month on the outstanding balance in your account. Is the annual rate of interest 18%? No! The annual effective rate is 19.56%.

A company wishes to provide a $3,000 scholarship every year for 10 years. The first scholarship is to be awarded one year from now. If the company can get a 9% yearly return on its investment, how much money should the company have now in order to be able to pay for this series of scholarships?
Answer: $19,252.97.

Some day, you'll want to buy a car, a house, or other items on time; to borrow money, or buy life insurance; to buy bonds, stocks or other investments. This course gives you the necessary background so that you may be able to borrow or invest more wisely.

Text. *Theory of Interest and Life Contingencies with Pension Applications: A Problem-Solving Approach* (revised edition) by Michael M. Parmenter of Memorial's Department of Mathematics and Statistics, or a similar book.

Marks. The grade has normally been calculated from a final examination (50%), two term tests (20% each) and a number of assignments (10%).

Calendar description. **2090 Mathematics of Finance** covers the topics: simple and compound interest and discount, forces of interest and discount, equations of value, annuities and perpetuities, amortization schedules and sinking funds, bonds and other securities, contingent payments.
Prerequisite: Mathematics 1001.

Offered. Occasionally