



# ACMA 850

## Pension Mathematics

Spring 2007  
Day Course

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Students requiring accommodations as a result of disability, must contact the Centre for Students with Disabilities 604-291-3112 or csdo@sfu.ca

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**Instructor: Barbara Sanders**

**Prerequisite:**

Permission of the Department

**Required Text:**

*A Problem Solving-Approach to Pension Funding and Valuation*, 2<sup>nd</sup> Ed., W.H.Aitken, 1996, Publisher: ACTEX Publications.

**References:**

*The Handbook of Canadian Pension and Benefit Plans*, 12<sup>th</sup> ed., 2002, Publisher: CCH Canadian Limited.

**Calendar Description:**

Overview of pension plans: design, funding, regulation, accounting standards. Pension funding methods: actuarial cost methods, terminal funding method. Individual actuarial cost methods: accrual benefit cost method, entry-age actuarial cost method, unit-credit method, individual-level-premium method, attained-age-normal method. Group actuarial cost methods. Gain and loss analysis. Asset-Liability matching. Stochastic models.

**Grading Scheme:**

Individual Presentation – 10%  
Midterm – 20%  
Project – 35%  
Final Exam – 35%

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*Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Please consult the General Guidelines of the calendar for more details.*

Revised January 2007