

**ACMA 320-3E  
ACTUARIAL MATHEMATICS I**

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**Spring 2001  
EVENING COURSE**

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**Instructor: K. COLLINS**

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**Prerequisites:**

ACMA 310 (with a grade of C+ or higher), MATH 232 and STAT 280 must precede or be taken concurrently.

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**Required Text:**

*Actuarial Mathematics* (2nd ed) by Bowers, Gerber, et al.; Publishers: Society of Actuaries

**References:**

- *ACTEX Study Manual for course 150 examination of the SOA* by G. Crofts, M.A. Gauger, D. London; publishers: ACTEX.
  - *Life Contingencies* by C.W. Jordan; publishers: SOA.
  - *Life Insurance Mathematics* by H.U. Gerber; publishers: Springer-Verlag.
  - *The Mathematics of Life Insurance* by Menge and Fisher; publishers: Ulrich's.
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## 5. Reserves:

Definition of prospective loss; basic contracts; and monthly premiums reserves: recursive equations for discrete reserves, reserves at fractional durations, allocation of the loss to the policy years.

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### **Grading:**

Homework - 10%

Midterm I - 20%

Midterm II - 20%

Final - 50%