



## ACMA 490-3E

### Selected Topics: Mathematics of Demography

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Fall 2004

EVENING COURSE

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Instructor: G. Parker

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#### Prerequisites:

ACMA 320

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#### Textbook:

Required Text:

*Actuarial Mathematics* (2nd ed 1997) by Bowers, Gerber, et al.; Publishers: Mad River Books (Division of ACTEX Publishing)

Reference:

*Introduction to the Mathematics of Demography* (3rd Edition), by R.L. Brown, Publishers: ACTEX Publications

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#### Calendar Description:

Data: collection, errors. Measures of mortality and fertility: crude rates, age-specified rates, adjusted measures. Construction of life tables from census data. Stationary population: survivorship group, lexis diagram, applications. Stable population: foundations, growth rate, applications, quasi-stable populations. Population projections: inter-censal, post-censal, logistic curve, component method. Uses of census data.

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#### Outline:

This course covers basic sources of demographic statistics, construction of life tables and an introduction to the mathematics of demography.

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#### Grading:

To be announced on the first day of class.

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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 department and acquisition of knowledge. Scholarly integrity is required of all members of the university. Please consult the General Guidelines of the calendar for more details.*

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Revised April 2004