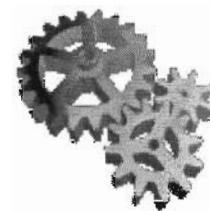


## Demographic Analysis (SYD 5135)

Professor Carlson / Fall 2007 / BEL 635 / Tu 2:00-4:30



The seminar meets once per week for 150 minutes, with one 10-minute break. At each meeting, participants discuss the content, background and applications of methods of demographic analysis covered in one chapter of the course text: Preston S, Heuveline P, Guillot M. 2001. *Demography: Measuring and Modelling Population Processes*. (London: Basil Blackwell Publishers). In some weeks, additional readings and topics complement the basic text. Computer spreadsheet assignments illustrate examples using demographic data. Practice on computers with the spreadsheet assignments forms part of each class meeting. Participants must complete each assignment (spreadsheet and associated essay) independently and return it for evaluation prior to the next meeting. Course grade is based on level of mastery of material in these 12 assignments, plus an application of at least one of these methods to an analytic project of the student's own devising.

### COURSE SCHEDULE

#### Week 1 - Basic Concepts and Measures

- Preston S, Heuveline P, Guillot M. 2000. *Demography: Measuring and Modeling Population Processes*. Chapter 1.
- Spreadsheet assignment on population growth rates

#### Week 2 - Age-Specific Rates and Probabilities

- Preston et al. Chapter 2
- Spreadsheet assignment on standardizing rates

#### Week 3 - The Life Table and Single Decrement Processes

- Preston et al. Chapter 3
- Spreadsheet assignment on life table construction
- Elwood Carlson. 2006. Ages of origin and destination for a difference in life expectancy. *Demographic Research* 14:217-36.
- Spreadsheet assignment on decomposing life expectancy

#### Week 4 - Multiple Decrement Processes

- Preston et al. Chapter 4
- Spreadsheet assignment on causes of death

#### Week 5 - Fertility and Reproduction

- Preston et al. Chapter 5.
- Bongaarts, John & Griffith Feeney. 1998. On the quantum and tempo of fertility. *Population and Development Review* 24:271-91.
- Spreadsheet assignment on fertility measures

#### Week 6 - Population Projection

- Preston et al. Chapter 6
- Spreadsheet assignment on population projection

#### Week 7 - The Stable Population Model

- Preston et al. Chapter 7
- Spreadsheet assignment on intrinsic growth/stable population

#### Week 8 - Demographic Relations in Non-stable Populations

- Preston et al. Chapter 8

- [Spreadsheet assignment](#) on variable-'r' for marital survival
- [Spreadsheet assignment](#) on variable-'r' for incomplete reporting

### Week 9 - Modeling Age Patterns of Vital Events

- Preston et al. Chapter 9
- Schmertmann, Carl P. 2003. [A system of model fertility schedules with graphically intuitive parameters](#). *Demographic Research* 9:79-110.
- [Websheet assignment](#) on fitting curves by least-squares

### Week 10 - Methods for Evaluating Data Quality

- Preston et al. Chapter 10
- Hill, Kenneth. 1987. [Estimating census and death registration completeness](#). *Asian and Pacific Population Forum* 1(3):8-13,23.
- [Spreadsheet assignment](#) on Brass techniques

### Week 11 - Indirect Estimation Methods

- Preston et al. Chapter 11
- Brass, William. 1996. [Demographic data analysis in less developed countries: 1946-1996](#). *Population Studies* 50(3):451-67.
- [Spreadsheet assignment](#) on indirect mortality estimation

### Week 12 - Multistate Increment-Decrement Processes

- Preston et al. Chapter 12
- [Spreadsheet assignment](#) on multistate increment-decrement life tables

### Weeks 13/14 - Presentation of student projects

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Students are expected to uphold the Academic Honor Code published in the Florida State University Bulletin and the Student Handbook. The Academic Honor System of the Florida State University is based on the premise that each student has the responsibility (1) to uphold the highest standards of academic integrity in the student's own work, (2) to refuse to tolerate violations of academic integrity in the university community, and (3) to foster a high sense of integrity and social responsibility on the part of the university community.

Students with disabilities needing academic accomodation should: (1) register with and provide documentation to the Student Disabilities Resource Center; (2) bring a letter to the instructor during the first week of class, indicating the need for and type of accomodation requested.

**This page maintained by Professor Carlson. Last updated August 10, 2007**