This course deals with classical demographic techniques used in the study of population, including general methods such as standardization and smoothing; techniques designed specifically for the analysis of mortality, nuptiality, and fertility; deterministic and stochastic approaches to population projections, and the stationary and stable population models. We pay attention to the quality of data from vital registration, censuses and surveys. While the coverage focuses on traditional demographic approaches, we also provide an introduction to relevant modern statistical methods. 

Prerequisite: Pop 501 and a statistics course at the level of wws507c.

List of Topics

In the list that follows each topic corresponds roughly to a week.

1. Introduction, Rates and Standardization

2. Interpolation and Graduation

3. Mortality
4. **Survival Models**

5. **Unobserved Heterogeneity**

6. **Competing Risks**

7. **Nuptiality**

8. **Fertility Rates**

9. **Birth Intervals**

10. **Tempo Effects**

11. **Population Projections**

12. **The Stable Population Model**
Bibliography

Our main textbook is Preston et al., which we plan to follow closely, but you may find discussions in the other three books useful at times.


Book Website

The following book, a compendium of useful techniques updating the famous United Nations *Manual X*, is available as a website at [http://DemographicEstimation.iussp.org](http://DemographicEstimation.iussp.org), as well as in pdf form.


Articles

The following articles expand on some of the issues discussed in the text, venture into related areas, or have become classics. I also include some of my own writings.


