**DEMOGRAPHY (DEMG)**

**DEMG 535 Quantitative Methods in Sociology I**
This course is an introduction to the practice of statistics in social and behavioral sciences. It is open to beginning graduate students and--with the permission of the instructor--advanced undergraduates. Topics covered include the description of social science data, in graphical and non-graphical form; correlation and other forms of association, including cross-tabulation; bivariate regression; an introduction to probability theory; the logic of sampling; the logic of statistical inference and significance tests. There is a lecture twice weekly and a mandatory "lab." Taught by: Allison, Smith
Course usually offered in fall term
Also Offered As: CRIM 536, SOCI 535
Activity: Lecture
1.0 Course Unit

**DEMG 536 Quantitative Methods in Sociology II**
As the second part of a two-semester sequence, this graduate course focuses on regression analysis as used in social science research. In particular, we discuss features and assumptions of linear regression and logistic regression models. We learn how to apply regression models to real social science data using Stata and how to interpret the results. Taught by: Allison, Kohler, Park, Schnittker, Smith
Course usually offered in spring term
Also Offered As: SOCI 536
Prerequisite: SOCI 535
Activity: Lecture
1.0 Course Unit

**DEMG 541 Gender, the Labor Force, and Markets**
Course not offered every year
Also Offered As: GSWS 532, SOCI 541
Activity: Seminar
1.0 Course Unit

**DEMG 604 Methodology of Social Research**
This course will give students familiarity with the common research methods social scientists use to conduct research. Ethnographic, interview, survey, experimental and historical/comparative research methods will be covered. Four themes will be explored: 1) the basics of solid research design, 2) the various advantages and disadvantages of each method, 3) when the use of a method is appropriate or inappropriate for the research question, and 4) how to evaluate researchers' claims on the basis of the evidence they present. These themes will be explored by reading examples of and conducting exercises designed to give students hands-on experience in each of the methods. Students will conduct the exercises on a topic of their choice, which together will culminate in their final paper. The course is required and restricted to second year students in sociology and demography.
Taught by: Smith, Wilde, Zuberi
Course usually offered in spring term
Also Offered As: SOCI 604
Activity: Lecture
1.0 Course Unit

**DEMG 607 Introduction to Demography**
A nontechnical introduction to fertility, mortality and migration and the interrelations of population with other social and economic factors.
Course usually offered in fall term
Also Offered As: SOCI 607
Activity: Lecture
1.0 Course Unit

**DEMG 609 Basic Demographic Methods**
This course provides an introduction to basic demographic concepts, data, indicators, and techniques. The course emphasizes hands-on applications of techniques in the analysis of population dynamics in the U.S. and elsewhere. Students will learn about the main sources of demographic data, including censuses, surveys, and vital statistics, and methods to estimate demographic processes (e.g., mortality, fertility). Students will leave the course with a solid grounding in a) the sources and limitations of demographic data; b) the construction of basic demographic indicators; and c) appropriate use of basic demographic techniques to answer questions about human populations.
Taught by: Guillot
One-term course offered either term
Also Offered As: SOCI 128, SOCI 609
Activity: Lecture
1.0 Course Unit

**DEMG 611 Struct Equation Model**
Statistical modeling with multiple equations and latent variables. The first part of the course will focus on linear models that could be estimated with any of the well-known SEM programs (e.g., LISREL, EQS, or Amos). Both Mplus and SAS will be used exclusively in this part of the course. The second part will focus on Mplus models for variables that are categorical, count, or censored. Maximum likelihood methods for missing data will also be covered.
Taught by: Allison
Course not offered every year
Also Offered As: SOCI 611
Activity: Lecture
1.0 Course Unit

**DEMG 612 Categorical Data Analysis**
This course deals with techniques for analyzing multivariate data which the dependent variable is a set of categories (a dichotomy or polytomy). Topics will include linear probability models, logit (logistic) regression models, probit models, logit analysis of contingency tables, cumulative logit and probit (for ordinal data), multinomial logit, conditional logit (discrete choice), unobserved heterogeneity, log-linear models, square tables, response-based sampling, and repeated measures. Methods will be illustrated using the Stata System. There will be several assignments using Stata to analyze data provided by the instructor.
Taught by: Allison
Course not offered every year
Also Offered As: SOCI 612
Activity: Lecture
1.0 Course Unit

**DEMG 613 Event History**
An applications-oriented course on statistical methods for the analysis of longitudinal data on the occurrence of events, also known as survival analysis, failure-time analysis, hazard analysis or duration analysis. Emphasis on regression-like models in which the risk of event occurrence is a function of a set of explanatory variables. Topics include accelerated failure-time models, hazard models, censoring, Cox regression models, time-dependent covariates, competing risks, repeated events, unobserved heterogeneity, discrete-time methods.
Taught by: Allison
Course not offered every year
Also Offered As: SOCI 613
Prerequisite: SOCI 563
Activity: Lecture
1.0 Course Unit
DEMGG 621 Health, Mortality & Population Aging
The course focuses on the description and explanation of health and mortality in human populations and their variability across several dimensions such as age, time, place, social class, race etc. The course includes general theories of health, mortality and morbidity, investigations of mortality and related processes in developing and developed countries, and discussions of future mortality trends and their implications for individual lives and the society at large.
Taught by: Elo
Course not offered every year
Also Offered As: SOCI 621
Activity: Lecture
1.0 Course Unit

DEMGG 622 Fertility
The biological, social and demographic factors explaining the levels, trends and differentials in human fertility. Data, measures, and methods used in the context of the more and the less developed countries, with an emphasis on the historical and current course of the fertility transition.
Taught by: Smith, Kohler, H
Course not offered every year
Also Offered As: SOCI 622
Activity: Seminar
1.0 Course Unit

DEMGG 630 Advanced Special Topics
Topics vary from semester to semester. Course titles include: Race, Colonialism & Methods; Mistakes, Errors, Accidents & Disasters, Graduate Research Practicum, Sociology of Violence: Gangs & Organized Crime.
Course not offered every year
Also Offered As: SOCI 430, SOCI 630
Activity: Seminar
1.0 Course Unit

DEMGG 634 Population Processes II
Population Processes II is part of a two-course sequence designed to introduce students to the core areas of demography (fertility, mortality, and migration) and recent developments in the field. PP II is divided into two parts. The first focuses on family demography and the biological, social and demographic factors explaining levels, trends, and differentials in human fertility transition with an emphasis on the historical and current course of fertility transition in developed and developing countries. The second part of the course provides a comprehensive review of theories and research on international migration. Readings examine patterns and processes of global migration during the classic age from 1800-1914 as well as during the postwar period from 1945 to the present. The course also covers a history and evaluation of immigration policies around the world, and devotes significant attention to theoretical and empirical perspectives on immigrant adaptation. Within this larger topic, we will also discuss internal migration and urbanization; the relationship between gender and migration; the spatial distribution of immigrants within the United States, immigrant communities, and ethnic enclaves; and the undocumented population in the United States.
Taught by: Flippen
Course not offered every year
Also Offered As: SOCI 377, SOCI 677
Activity: Seminar
1.0 Course Unit

DEMGG 707 Second-Year Research Seminar I
This course is intended to hone the skills and judgment in order to conduct independent research in sociology and demography. We will discuss the selection of intellectually strategic research questions and practical research designs. Students will gain experience with proposal writing, the process of editing successive drafts of manuscripts, and the oral presentation of work in progress as well as finished research projects. The course is designed to be the context in which master's papers and second year research papers are written. This is a required course for second year graduate students in Demography. Others interested in enrolling in only one of the courses may do so with the permission of the Chair of the Graduate Group in Demography.
Course usually offered in fall term
Also Offered As: SOCI 707
Activity: Seminar
1.0 Course Unit
DEM 708 Second-Year Research Seminar II
Demography 708 is the second part of a two-course sequence designed to introduce and familiarize second year students with current norms for academic research, presentation and publishing in the field of Demography. In DEM 708 students are expected to finalize the analyses and to complete their second year research paper. This is a required course for second year demography students. Others interested in enrolling in the course may do so with the permission of the Chair of the Graduate Group in Demography. 
Course usually offered in spring term
Also Offered As: SOCI 708
Activity: Seminar
1.0 Course Unit

DEM 731 Advanced Demographic Methods
This course considers a variety of procedures for measuring and modeling demographic processes. We will consider both deterministic (drawn from classic demographic methods, stable population theory, and the like) and stochastic (drawn from statistics) perspectives and methods, including their integration. Pre-requisites: DEMG 609 and SOCI 536 (or its equivalent).
Taught by: Smith
Course not offered every year
Also Offered As: SOCI 731
Prerequisite: DEMG 609 AND SOCI 536
Activity: Seminar
1.0 Course Unit

DEM 796 Demographic, Economic, and Social Interrelations
The course investigates economic and social determinants of fertility, mortality, and migration, and it discusses the effects of population variables on economic and social conditions, including economic and social development. Topics discussed in the course include: How do economic changes affect marriage, divorce, and child bearing decisions? How do households make decisions about transfers and requests? How can economic and sociological approaches be combined in explanatory models of demography change? How does immigration to the US affect the ethnic composition of the population, the earnings of native workers, taxes on natives, and the macro-economy? What causes the aging of populations, and how will population aging affect the economies of industrial nations, and in particular, pension programs like Social Security? What accounts for the rise in women’s participation in the wage labor force over the past century? How are family composition and poverty interrelated? Does rapid population growth slow economic development with low income countries? In addition to these topics, the course also covers selected methods not included in DEMG 535, DEMG 536 or DEMG 609.
Taught by: Kohler
Course not offered every year
Also Offered As: SOCI 296, SOCI 796
Activity: Lecture
1.0 Course Unit

DEM 999 Independent Study
Primarily for advanced students who work with individual instructors upon permission. Intended to go beyond existing graduate courses in the study of specific problems or theories or to provide work opportunities in areas not covered by existing courses.
One-term course offered either term
Activity: Independent Study
1.0 Course Unit