TRAINING AND DEGREES

Predoctoral training is provided through a multidisciplinary, dual-title graduate program in Demography. This unique program allows students to earn a dual-title master’s and doctoral degree in Demography and one of the following fields: agricultural, environmental, and regional economics; anthropology; economics; health policy and administration; human development and family studies; rural sociology; or sociology. The program enables students to develop expertise and skills in demographic theory, methodologies, and policy analysis while maintaining a professional identification with their social science disciplines. Demography studies the size, composition, and distribution of the population; changes in these characteristics; the processes that determine these changes (fertility, mortality, aging, family status changes, immigration); and their social, economic, and cultural causes and consequences.

The following Graduate School–awarded, dual-title degrees are conferred:

- M.S. and Ph.D. in Agricultural, Environmental, and Regional Economics, and Demography
- M.A. and Ph.D. in Anthropology and Demography
- M.A. and Ph.D. in Economics and Demography
- M.S. and Ph.D. in Health Policy and Administration and Demography
- M.S. and Ph.D. in Human Development and Family Studies and Demography
- M.S. and Ph.D. in Rural Sociology and Demography
- M.A. and Ph.D. in Sociology and Demography

A Ph.D. minor in Demography is available to Penn State graduate students in programs other than the dual-degree programs listed above. Graduate students taking the minor have most recently come from Biobehavioral Health, Education Theory and Policy, and Geography.

Support for predoctoral students in Family Demography is provided by the Eunice Kennedy Shriver National Institute of Child Health and Human Development T32 Award. In addition, research and teaching assistantships are often available through the Population Research Institute and affiliated departments.

DEMOGRAPHY PROGRAM

The Demography dual-title degree program is administered by the program director and the Demography Program Advisory Committee, who are responsible for the program’s management. The director and advisory committee maintain the program definition, identify faculty and courses appropriate to the program, and recommend policies and procedures for its operation to the dean of the Graduate School. The program enables students from diverse graduate departments to attain knowledge of and be identified with the content, techniques, methodology, and policy implications of demography, while maintaining a close association with areas of application.

Admission Requirements

To pursue a dual-title degree under this program, the student must first apply to the Graduate School and be admitted through one of the following graduate degree programs: Agricultural, Environmental, and Regional Economics; Anthropology; Economics; Health Policy and Administration; Human Development and Family Studies; Rural Sociology; or Sociology. Upon admission to one of the above programs and a recommendation from a Demography program faculty member in that department, the student will be admitted to the dual-title degree program in Demography (typically, although not necessarily, at the beginning of their first semester at Penn State).

Penn State’s Graduate School states that scores from the Graduate Record Examination (GRE) are required.
for admission. At the discretion of a graduate program, a student may be admitted provisionally for graduate study in a program without these scores. (For conditions for provisional admission, see the “Application and Admission” section of the Graduate Degree Programs Bulletin.) Requirements listed below are in addition to general Graduate School requirements stated in the “General Information” section of the Graduate Degree Programs Bulletin. TOEFL scores are required of all students with English as a second language. Published Graduate School requirements apply in all cases.

All Graduate School application materials should be submitted by January 5th, for the best chance of admission and financial aid. Applicants should have a junior–senior cumulative average well above the minimum of 3.00, as well as appropriate courses in statistics and substantive knowledge as specified by the department to which they are applying. The application folder should include three letters of recommendation and a statement describing and explaining the applicant’s interest in the Demography program and goals, during and after graduate studies.

### The Penn State Model for Demography Training

(based on a dual-degree structure in seven departments: Agricultural, Environmental, and Regional Economics; Anthropology; Economics; Health Policy and Administration; Human Development and Family Studies; Rural Sociology; or Sociology)
DEMOGRAPHY FACULTY

David G. Abler, Ph.D. (Chicago) Professor of Agricultural, Environmental, and Regional Economics, and Demography
David M. Almeida Ph.D. (Victoria, Canada) Professor of Human Development and Family Studies, and Demography
Duane Alwin, Ph.D. (Wisconsin) McCourtney Professor of Sociology, Demography, and Human Development and Family Studies
Mayra Bamaca-Colbert, Ph.D. (Arizona State) Assistant Professor of Human Development and Family Studies, and Demography
Rhonda Belue, Ph.D. (Cornell) Associate Professor of Health Policy and Administration, and Demography
Guangqing Chi, Ph.D. (Wisconsin—Madison) Associate Professor of Rural Sociology and Demography
Sarah Damaske, Ph.D. (New York University) Assistant Professor of Labor and Employment Relations, Sociology, Women’s Studies, and Demography
H. Harrington (Bo) Cleveland, Ph.D. (Arizona) Associate Professor of Human Development and Family Studies, and Demography
Jonathan (JD) Daw, Ph.D. (UNC Chapel Hill), Assistant Professor of Sociology and Demography
Francis Dodoo, Ph.D. (Pennsylvania) Liberal Arts Research Professor of Sociology and Demography
David J. Eggebeen, Ph.D. (North Carolina) Associate Professor of Human Development and Family Studies, Sociology, and Demography
Glenn Firebaugh, Ph.D. (Indiana) Distinguished Professor of Sociology and Demography
Christopher S. Fowler, Ph.D. (Washington) Assistant Professor of Geography, and Demography
Michelle Frisco, Ph.D. (Texas, Austin) Associate Professor of Sociology and Demography
S. Michael Gaddis, Ph.D. (UNC at Chapel Hill). Assistant Professor of Sociology and Demography
Stephan J. Goetz, Ph.D. (Michigan State University) Professor of Agricultural Environmental and Regional Economics
Deborah Roempke Graefe, Ph.D. (Penn State) Research Associate, Population Research Institute
Melissa A. Hardy, Ph.D. (Indiana) Distinguished Professor of Sociology and Demography
Steven A. Haas, Ph.D. (Wisconsin) Associate Professor of Sociology and Demography
Marianne Hillemeyer, Ph.D. (Michigan) Professor of Health Policy and Administration, and Demography
John Iceland, Ph.D. (Brown) Professor of Sociology and Demography
Rukmalie Jayakody, Ph.D. (Michigan) Associate Professor of Human Development and Family Studies, and Demography
Leif I. Jensen, Ph.D. (Wisconsin) Distinguished Professor of Rural Sociology and Demography
David R. Johnson, Ph.D. (Vanderbilt) Professor of Sociology, Human Development and Family Studies, and Demography
Valarie King, Ph.D. (Pennsylvania) Professor of Sociology, Demography, and Human Development and Family Studies
Nancy S. Landale, Ph.D. (Washington) Liberal Arts Research Professor of Sociology and Demography
Barrett A. Lee, Ph.D. (Washington) Professor of Sociology and Demography
Nancy Luke, Ph.D. (Pennsylvania) Associate Professor of Sociology and Demography
Molly Martin, Ph.D. (Wisconsin—Madison) Associate Professor of Sociology and Demography
Stephen A. Matthews, Ph.D. (Wales, Cardiff) Professor of Sociology, Anthropology, Geography, and Demography
Susan M. McHale, Ph.D. (UNC Chapel Hill). Distinguished Professor of Human Development and Family Studies, and Demography
Patricia Y. Miranda, Ph.D. (Michigan) Assistant Professor of Health Policy and Administration and Demography
Shannon M. Monnat, Ph.D. (SUNY-Albany) Assistant Professor of Rural Sociology and Demography
Salvador Oropeza, Ph.D. (Washington) Professor of Sociology and Demography
Nalam Ram, Ph.D. (Virginia) Associate Professor of Human Development and Family Studies, and Demography
David Shapiro, Ph.D. (Princeton) Professor of Economics, Demography, and Women’s Studies
Jason R. Thomas, Ph.D. (Washington) Assistant Professor of Sociology and Demography
Kevin J. A. Thomas, Ph.D. (Pennsylvania) Associate Professor of Sociology, Demography, and African Studies
Jennifer Van Hook, Ph.D. (Texas, Austin) Professor of Sociology and Demography
Ashston Verderey, Ph.D. (UNC Chapel Hill) Assistant Professor of Sociology and Demography
James W. Wood, Ph.D. (Michigan) Professor of Anthropology and Demography

Emeritus faculty

Paul Amato, Ph.D. (James Cook University) Hoffman Emeritus Professor of Family Sociology and Demography
Gordon F. De Jong, Ph.D. (Kentucky) Distinguished Professor Emeritus of Sociology and Demography
Diane K. McLaughlin, (Penn State) Emeritus Professor of Rural Sociology and Demography
Pamela Farley Short, Ph.D. (Yale) Emeritus Professor of Health Policy and Administration, and Demography
DEGREE REQUIREMENTS

To qualify for a dual-title degree, students must satisfy the requirements of the graduate program in which they are enrolled, including the communication/foreign language requirements, if any. In addition, they must satisfy the minimum requirements in the Demography program option described below, as established by the Demography program committee. Within this framework, final course selection is determined by students and their committees.

Master’s Degree

- Complete a minimum of 12 demography-related course credits in the following curriculum categories:
  - Disciplinary survey course (3 credits)
  - Demographic Techniques (Soc 573) (3 credits)
  - Seminars in demographic processes (3 credits)
  - Seminars in population studies (3 credits)

Some courses may satisfy the requirements of both the graduate major program and the Demography option.

- Write a master’s thesis on a topic related to demography. The thesis supervisor (or co-supervisor) must be a faculty member of the graduate program granting the degree and the Demography program.

- Enroll in Demography 590 (Demography Colloquium) for 1 credit each Fall semester in residence until completion of a Comprehensive Exam.

Ph.D. Degree

- Complete a minimum of 24 demography-related course credits. The following is required as a minimum in each curriculum category:
  - Disciplinary survey course (3 credits)
  - Demographic methods courses* (6 credits)
  - Seminars in demographic processes (6 credits)
  - Seminars in population studies (3 credits)
  - Elective core demography courses (6 credits)

*Demographic Techniques (Soc 573) is required.

An individual studies course (Demography 596, 3 credits) can be used to enhance training in demographic scholarship, methods, or research experience (subject to approval by the program director). Final course selection is determined in consultation with the student’s doctoral committee. For students entering with a master’s degree from another institution, equivalent course credits may be accepted.

At least 3 demography course credits must be taken outside the graduate major department.

- A four-member committee is required for a dual-title degree program. That is, the chair or co-chair of dissertation research and at least one additional member of the doctoral committee must be members of the Demography program faculty. The Demography faculty members on the student’s committee are responsible for the demographic component of both instruction and research (including where relevant administering an examination in demography as part of the Comprehensive Examination of the doctoral student).

- Write a dissertation on a topic related to demography.

- Enroll in Demography 590 for 1 credit each Fall semester in residence until completion of a Comprehensive Exam.

Minor in Demography

A Ph.D. minor in Demography is available for doctoral students in graduate programs who find it advantageous to include demographic content, methods, and policy analysis in their program of study. The student’s doctoral committee must approve of the choice of this minor, and at least one member of the doctoral committee must be from the Demography program faculty. To qualify for a minor in Demography, students must satisfy the requirements of their graduate major program and complete 15 course credits in demography (outside of their home department) and Demography 590. A minimum of 3 credits is required in each of the following: (1) disciplinary survey courses, (2) Demographic Techniques (Sociology 573), (3) seminars in demographic processes, and (4) seminars in population studies. Doctoral minor students must enroll in Demography 590 for 1 credit each fall semester in residence until completion of a Comprehensive Exam.

For students seeking a Ph.D. minor in departments participating in the dual-title major (Agricultural, Environmental, and Regional Economics; Anthropology; Economics; Health Policy and Administration; Human Development and Family Studies; Rural Sociology; and Sociology), all credit requirements for the Demography minor must be in core demography courses outside his/her major field (i.e., home department).

Student Aid

In addition to the fellowships, graduate assistantships, and other forms of financial aid described in the student aid section of the Graduate Degree Programs Bulletin or offered through the student’s participating department, the following awards typically have been available to graduate students in this program: NICHD traineeships in family demography, and Demography program and Population Research Institute research assistantships.
Demography Dual-Degree Curriculum: Core Pedagogic Training Areas and Courses

A minimum of eight academic courses are required for the dual-Ph.D., and four courses for a dual-master’s degree. Demography curriculum courses offered through the student’s home department may count toward both home department and Demography dual-degree requirements. However, at least some Ph.D. program demography courses must be taken outside the student’s major program department. A doctoral minor in Demography requires five academic courses outside of their home department.

Discipline Survey Courses (one course required for all candidates, unless previously completed)
- Anthropology 408, Anthropological Demography
- Economics 463, Economic Demography
- Sociology 423, Social Demography

Demographic Methods Courses (one course required for master’s and doctoral minor candidates and two courses required for Ph.D.; a third course can count as an elective)
- Sociology 573, Demographic Techniques (required)
- Sociology 576, Applied Mathematical Demography
- Sociology 577, Techniques of Event History Modeling
- Sociology 579, Spatial Demography

Students may count one but not both of the following:
- Human Development and Family Studies 517, Multivariate (Multi-level) Change
- Sociology 578, Multi-level Models

Special Topics (597 Courses) methods courses have included Longitudinal Data Analysis and Social Networks.

Demographic Processes Seminars (one course required for master’s and doctoral minor candidates and two courses required for Ph.D.; additional course(s) can count as an elective(s))
- Anthropology 566, Infectious Diseases in Human Populations
- Rural Sociology 525, Fertility, Population Change, and Development
- Sociology 521, Family Demography
- Sociology 523, Internal and International Migration
- Sociology 524, The Demography of Human Fertility
- Sociology 525, Immigration, Incorporation, and Inequalities
- Sociology 526/Health Policy & Administration 526, Health Disparities
- Sociology 527, Migration, Urbanization and Policy in the Developing World
- Sociology 532, Global Health and Mortality

Elective Population Studies Seminars (one course required for master’s and doctoral minor candidates and up to three courses required for Ph.D.)
- Agricultural, Environmental, and Regional Economics 550, International Economic Development and Agriculture
- Anthropology 575, Population, Food, and Traditional Farming
- Anthropology 566, Infectious Diseases in Human Populations
- Educational Theory and Policy 516, Education and Demographic Change in the U.S. and Abroad
- Educational Theory and Policy 517, Education of Immigrants’ Children
- Health Policy and Administration 541, Poverty, Race, Ethnicity and Child Health
- Human Development and Family Studies 525, Introduction to Family Studies
- Human Development and Family Studies 531/ Sociology 531, Family Disorganization
- Human Development and Family Studies 537/ Sociology 537, Biosocial Perspectives on the Family
- Human Development & Family Studies 577, Poverty, Policies & Child Development
- Rural Sociology 530, Sociology and Demography of Poverty
- Sociology 522, Demography of the Life Course
- Sociology 530, Sociology of the Family
- Sociology 560, Urban Sociology

Special Topics (597 Courses)

Special Topic courses are offered almost every semester reflecting new faculty research interests and new faculty hires. Recent Special Topics courses offered as Demographic Process Seminars or Population Studies Seminars have included Immigration, Family and Health; Immigrant, Youth and Health; Immigration, Race and Residential Inequality; Race, Ethnicity, and Family Processes; Population and Gender; Work, Family Demography, and Policy; Demography of Social Stratification; Demography of Aging; Health and Health Services Across the Life Course; Population and Environment; and Education and World Health.

Professional Development

- Demography 590, Demography Colloquium (one credit required each fall semester in residence until completion of Comprehensive Exam)
CORE COURSES IN DEMOGRAPHY

For official course descriptions please see individual department listings available at:
www.psu.edu/bulletins/whitebook

Professional Development

Demography 590 Colloquium: Professional Development Seminars and Workshops

Disciplinary Survey Courses

Anthropology 408 Anthropological Demography: Analysis of demographic studies in traditional and very small populations.

Economics 463 Economic Demography: Economic aspects of growing versus stationary populations; historical interrelationships between demographic and economic factors; economic welfare and policy implications.

Sociology 423 Social Demography: Social demographic perspectives on fertility, mortality, morbidity, migration, demographic transitions, immigration, family, aging population, and minorities.

Demographic Methods Courses

Demographic Techniques (Sociology 573) is required for all dual-degree and doctoral minor candidates, and one additional seminar is required for dual-Ph.D. candidates. A third demographic methods course can count as an elective population studies course.

Sociology 573 Demographic Techniques: Survey of demographic research methods; demographic data; measures of health, mortality, fertility, and migration; life tables; population projections. (Required)

Sociology 576 Applied Mathematical Demography: Survey of mathematical models used in the study of population growth; survivorship; fertility, migration, stability, kinship, labor force projections.

Sociology 577 Techniques of Event History Modeling: In-depth review of survival analysis methods for the analysis of change in discrete dependent variables.

Sociology 579 Spatial Demography: Spatial concepts and analysis tools applied to demographic research, including issues in the collection, integration, manipulation, visualization, and analysis of both primary and secondary demographic data sources in GIS.

Multilevel models: Students may count one but not both of the following courses toward the Ph.D. demographic methods requirement.

Human Development and Family Studies 517 The General Linear Mixed Model: Analysis of both general linear mixed models and the multilevel formulation, i.e., the hierarchical linear model (HLM). Emphasis on longitudinal (growth curve) models.

Sociology 578 Multilevel Models: Contextual analysis and growth modeling as applied to characteristics of schools, neighborhood, geographic regions, and individual outcomes. Two-level and three-level models, multilevel analysis of discrete dependent variables, and latent variable models.

Seminars in Demographic Processes

Anthropology 566 Infectious Diseases in Human Populations: Population aspects of infectious disease demography, ecology, and epidemiology; interactions between human host and its microparasites; and the implications of infectious diseases in modeling human population dynamics and ecology.

Rural Sociology 525 Fertility, Population Change, and Development: Fertility and population growth in less-developed countries; theories of fertility change, agricultural development, and population policies.

Sociology 521 Family Demography: Current theoretical, methodological, and substantive issues in family demography; nuptiality, divorce, household composition, female employment, migration, and fertility.

Sociology 523 Internal and International Migration: Theories, frameworks, and policies related to internal and international migration patterns in developed and developing nations.

Sociology 524 The Demography of Human Fertility: Overview of major issues and methodological approaches in the demographic study of human fertility in developing and developed countries.

Sociology 525 Immigration, Incorporation, and Inequality: Current research in incorporation and assimilation of immigrants; linkages among immigration, inequality, and racial stratification.

Sociology 526 Health Policy & Administration 526 Health Disparities: Analysis of health outcomes, the social conditions that are related to population health disparities, and some of the demographic mechanisms through which these patterns are produced.

Sociology 527 Migration Urbanization and Policy in the Developing World: Dynamics of international and internal migration process in the developing world; impacts on urbanization; human capital and “brain-drain” migration, policy implications and management of migration.
Sociology 532 Global Health and Mortality: Major issues in international health and mortality from a demographic perspective. Special attention to global South health and mortality patterns and to health/mortality data quality issues.

Seminars in Population Studies

Agricultural, Environmental, and Regional Economics 550 International Economic Development and Agriculture: The economic development process with particular emphasis on agriculture and population.

Anthropology 575 Population, Food, and Traditional Farming: Examination of theories and evidence about population and preindustrial agriculture and formulating new models of the traditional farming household as a demographic enterprise.

Educational Theory and Policy 516 Education and Demographic Change in the United States and Abroad: Interrelationship between schooling and employment, marriage, fertility, and migration. Focus comparatively on the United States and developing countries.

Educational Theory and Policy 517 Education of Immigrants’ Children: Theoretical perspectives and empirical research on how different groups of immigrants’ children fare by level of education, student’s cognitive development, and school contexts.

Health Policy and Administration 541 Poverty, Race, Ethnicity, and Child’s Health: This graduate seminar focuses on socioeconomic and racial/ethnic disparities in the health and well-being of infants, children, and adolescents, as well as policies and programs aimed at improving children’s health and reducing disparities.

Human Development and Family Studies 525 Introduction to Family Studies: Interdisciplinary introduction to issues pertaining to family studies, and relationships to demography.

Human Development and Family Studies 531/ Sociology 531 Family Disorganization: Theory and research on population-related family processes, including family formation, parent–child relations, divorce, and family in remarriage.

Human Development and Family Studies 537/ Sociology 537 Biosocial Perspectives on the Family: Theoretical and measurement advances in knowledge about family processes resulting from the integration of information from the fields of behavioral endocrinology (study of hormones), behavioral genetics, evolutionary psychology, and demography.


Rural Sociology 530 Sociology and Demography of Poverty in the United States: Theory and measurement of poverty with an emphasis on the United States; social and demographic characteristics of the poor, urban underclass, and vulnerable rural groups; social welfare policy.

Sociology 522 Demography of the Life Course: Theoretical bases, critical concepts, and methods of life course analysis; applications to age and gender population cohorts.

Sociology 530 Sociology of the Family: In-depth analysis of major issues and demographic empirical research in family, work, and gender; social class and families; fathers and grandparents: family law and policy issues.

Sociology 560 Urban Sociology: Examination of the structure and dynamics of North American cities and the residents’ experiences in such settings.

Recent Special Topics courses offered as Demographic Process Seminars or Population Studies have included:

- Immigration, Family and Health
- Immigrant, Youth and Health
- Immigration, Race and Residential Inequality
- Race, Ethnicity, and Family Processes
- Population and Gender
- Work, Family Demography, and Policy
- Demography of Social Stratification
- Demography of Aging
- Health and Health Services Across the Life Course
- Population and Environment
- Education and World Health

Demography 596 Individual Studies: Creative projects, including non-thesis research, which are supervised (by a Demography Faculty) on an individual basis and which fall outside the scope of formal courses (subject to approval by the program director).
RELATED (Non-Core) COURSES IN RESEARCH METHODS AND STATISTICS

Courses in Qualitative Methods

**Anthropology 458**, Ethnographic Field Methods  
**Anthropology 561**, Field Methods in Anthropology  
**Communication Arts and Sciences 562**, Qualitative Research Methods  
**Educational Leadership 589**, Use of Mixed Methods in Educational and Scientific Research  
**Rural Sociology 597**, Qualitative Methods

Graduate Minor in Statistics (Department of Statistics)

**Statistics 501** Regression Methods  
**Statistics 502** Analysis of Variance and Design of Experiments  
**Statistics 503** Design of Experiments  
**Statistics 504** Analysis of Discrete Data  
**Statistics 505** Applied Multivariate Statistical Analysis  
**Statistics 506** Sampling Theory and Methods  
**Statistics 507** Epidemiologic Research Methods  
**Statistics 509** Design and Analysis of Clinical Trials  
**Statistics 501** Applied Time Series Analysis

CONTACT INFORMATION

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This publication is available in alternative media on request.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to minorities, women, veterans, individuals with disabilities, and other protected groups.  
Nondiscrimination:  
http://guru.psu.edu/policies/AD85.html

CAMPUS SECURITY CRIME STATISTICS—The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act and Pennsylvania Act of 1988 require that crime statistics for Pennsylvania colleges and universities be made available to applicants upon request. Penn State’s combined Annual Security and Annual Fire Safety Report includes statistics for the previous three years concerning reported crimes that occurred on campus, in certain off-campus buildings owned or controlled by the University, and on public property within or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as those concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. You may obtain this information for the Penn State campus to which you are applying by accessing the website at www.police.psu.edu/clery/ A printed copy of the report may be obtained by writing to University Police & Public Safety, The Pennsylvania State University, Eisenhower Parking Deck, University Park PA 16802-6703 or by calling 814-865-1864.

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