

Term Information

Effective Term Summer 2016

General Information

Course Bulletin Listing/Subject Area Sociology
Fiscal Unit/Academic Org Sociology - D0777
College/Academic Group Arts and Sciences
Level/Career Graduate
Course Number/Catalog 7753
Course Title Introduction to Demographic Analysis
Transcript Abbreviation Intro Demog Analy
Course Description An exposition of census data and vital statistics, demographic rates, life tables, cohort analysis, and similar elementary techniques and data sources in demography.
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Seminar
Grade Roster Component Seminar
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites Graduate standing, or permission of instructor with approval by Graduate School for undergraduate credit.
Exclusions

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 45.1101
Subsidy Level Doctoral Course
Intended Rank Masters, Doctoral

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- This course is an introduction to demographic analysis. Students will acquire the skills to apply basic demographic techniques that can be used to investigate a wide range of demographic questions and population processes.

Content Topic List

- Demographic Rates
- Life Tables
- Cohort Analysis
- Decomposition

Attachments

- Intro to Demographic analysis syllabus revised.docx: revised syllabus

(Syllabus. Owner: Hopkins,Kelly Renee)

- reply to contingency and rec for Sociology 7753.docx

(Academic Program Revision Stmt. Owner: Hopkins,Kelly Renee)

Comments

- See 1-19-16 e-mail to R. Frank. *(by Vankeerbergen,Bernadette Chantal on 01/19/2016 10:46 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Hopkins,Kelly Renee	12/10/2015 11:01 AM	Submitted for Approval
Approved	Williams,Kristi L.	12/10/2015 11:01 AM	Unit Approval
Approved	Haddad,Deborah Moore	12/10/2015 11:28 AM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	01/19/2016 10:46 AM	ASCCAO Approval
Submitted	Hopkins,Kelly Renee	02/01/2016 01:50 PM	Submitted for Approval
Approved	Williams,Kristi L.	02/16/2016 11:10 AM	Unit Approval
Approved	Haddad,Deborah Moore	02/16/2016 03:16 PM	College Approval
Pending Approval	Nolen,Dawn Vankeerbergen,Bernadette Chantal Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler Hogle,Danielle Nicole	02/16/2016 03:16 PM	ASCCAO Approval

SOCIOLOGY: Introduction to Demographic Analysis

Time: Wednesday 5:00-7:45
Room 245, Townshend Hall
Lab: TO 250

Office Hours: Wednesday/Friday 10:30-11:30 AM or by appointment
Location: 106 Townshend Hall
Email: zheng.64@osu.edu

Course Description

This is part of a two-course demographic training series serving as an introduction to the field of demography and population studies. This course covers basic demographic techniques that can be used to investigate a wide range of demographic questions and population processes. More specifically, we will address how demographers (1) measure vital rates (mortality, fertility, migration, and morbidity), population change, composition and structure; (2) identify the laws and regularities governing the relationship between vital rates and population structure; and (3) use these regularities to study population processes and related population, health, social, and economic problems.

Prerequisites

Knowledge of calculus and matrix algebra is advantageous but not required. In this class, we will learn to understand population dynamics in discrete time fashion. But we may sometimes apply the elementary concepts of differential and integral calculus to the study of population dynamics in continuous time fashion with or without age differentiation.

Required Textbook

Rowland, Donald T. 2003. *Demographic Methods and Concepts*. Oxford University Press.

Preston, Samuel H., Patrick Heuveline, and Michel Guillot. 2001. *Demography: Measuring and Modeling Population Processes*. Malden, MA: Blackwell Publishers, Inc.

Class Structure

Because we will conduct the class as a combination of lecture and seminar, students are required to do the readings before the class. Class lectures will be interactive and you should be prepared to participate. In addition, you will be asked to give presentation of the articles under the “special topic” which illustrate the applications, limitations or extensions of the method studied.

Assignments and Grading

Assignments in this course consist of eight problem sets, and two or three presentations of an empirical paper.

Problem set (8)	80%
Class presentation / discussion	20%

These eight problem sets are as follows:

Problem Set 1: Growth Rates

Problem Set 2: Population Pyramids Using IDB Data

Problem Set 3: Number of Events, Crude Rates, Age-Specific Rates, and Standardization/Decomposition

Problem Set 4: Lexis Diagrams

Problem Set 5: Single Decrement Life Table

Problem Set 6: Multiple Decrement Life Table

Problem Set 7: Measures of Fertility

Problem Set 8: Projecting Populations Forward

You will be asked to give presentation of the articles under the “special topic” which illustrate the applications, limitations or extensions of the method studied. The presentation should be 15 minutes long. You should be prepared to answer questions from the class related to this topic. The assignment of presentation will be determined in the second week when the class size is finalized.

More Books

Hinde, Andrew. 1998. *Demographic Methods*. Hodder Arnold.

Swanson, David A. and Jacob S. Siegel. 2004. *The Methods and Materials of Demography*. Emerald Group Publishing.

Academic Misconduct

University rule 3335-31-02 requires that “each instructor shall report to the committee on academic misconduct all instances of what he or she believes may be academic misconduct.” Academic Misconduct is defined by the Ohio State University’s Code of Student Conduct as: Any activity that tends to compromise the academic integrity of the university, or subvert the educational process. Examples of academic misconduct include, but are not limited to, cheating on tests, misrepresenting yourself or your work, including passing off other’s work as your own or copying papers off the Internet, and plagiarism. With respect to literature reviews, copying entire sentences or phrases of another author’s summary of relevant research constitutes plagiarism, even if the original author’s sources are cited by the person copying the work. If you are uncertain whether something constitutes academic misconduct, please ask! Ignorance of the University’s Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct (<http://studentlife.osu.edu/csc/>). If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my

suspensions to the Committee on Academic Misconduct.

Disabilities

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 614-292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

Class Schedule

Jan 13	Introduction to the course McFalls, Joseph A., Jr. 2007. "Population: A Lively Introduction." Washington, DC: Population Reference Bureau, Bulletin No. 53.3.
	Basic demographic concepts and measures Rowland 1.1-1.2, 1.4-1.8 PHG 1.1-1.5
Jan 20 (PS #1 distributed)	Basic demographic concepts and measures (con't) Rowland 2.1-2.6 PHG 1.6-1.9
<i>Lab for growth rates and doubling time</i>	
Jan 27 (PS #1 due) (PS #2 distributed)	Demographic data: Census, vital statistics, and surveys Rowland 1.3 Special Topic: Reporting error Iversen, Roberta R. and Frank F. Furstenberg. 1999. "How Much Do We Count? Interpretation and Error-Making in the Decennial Census." <i>Demography</i> 36:121-134. Special Topic: Measurement Dan Black, Seth Sanders and Lowell Taylor. 2003. "Measurement of Higher Education in the Census and Current Population Survey." <i>Journal of the American Statistical Association</i> 98(463): 545-554. <i>Also see:</i> -- U.S. Census Bureau home page -- National Center for Health Statistics . A broad array of demographic data available. -- National Vital Statistics Report . (12 monthly issues + provisional tables on births, deaths, marriages.) -- Current Population Survey (Census Bureau) -- National Survey of Family Growth (CDC) -- Survey of Income and Program Participation (Census Bureau) -- Panel Study of Income Dynamics (Michigan) -- National Long Term Care Survey (Duke) -- Health and Retirement Survey (HRS) and Asset and Health Dynamics Among the Oldest Old (AHEAD) (Michigan) -- National Longitudinal Study of Adolescent Health (UNC) Other surveys of possible interest: -- International Social Survey Programme General social surveys in a large set of countries -- Demographic and Health Surveys (DHS) Developing country surveys of fertility and maternal/child health -- National Health and Nutrition Examination Survey -- National Health Interview Survey -- National Survey on Drug Use and Health -- Computer Usage Supplement to Current Population Survey -- National Longitudinal Surveys

	-- <u>Mid-life in the US (MIDUS)</u>
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	Population structure Rowland 3.1-3.6 Coale, A.J. 1964. How a population ages and grows younger. Pp. 47-58 in R. Freedman (ed.) Population: <i>The Vital Revolution</i> . Anchor Books.
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Feb 3 (PS #2 due)	Standardization and decomposition Rowland 4.1-4.3 PHG 2.1-2.3
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	Standardization and decomposition (con't) Special Topic: Compositional Arguments for Changing Crude Rates Goldstein, Joshua R. 1999. "The leveling of divorce in the United States." <i>Demography</i> 36:409-414. Smith, Herbert L., S. Philip Morgan, and Tanya Koropecjy-Cox. 1996. "A decomposition of trends in the nonmarital fertility ratios of blacks and whites in the United States, 1960-1992." <i>Demography</i> 33:141-151.
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Feb 10 (PS #3 distributed)	<i>Lab for standardization and decomposition</i>
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	Lexis diagrams Rowland 4.4 PHG 2.4 to 2.6 Ryder, Norman B. 1965. "The Cohort as a Concept in the Study of Social Change." <i>American Sociological Review</i> 30:843-861. Special Topic: Recognizing Censoring and Selectivity Rindfuss, Ronald R., James A. Palmore, and Larry L. Bumpass. 1982. "Selectivity and the Analysis of Birth Intervals from Survey Data." <i>Asian and Pacific Census Forum</i> 8:5-10, 15-16
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Feb 17 (PS #3 due) (PS #4 distributed)	Lexis diagrams (con't) Special Topic: Retrospective Survey Estimates of Mortality Merli, Giovanna M. 2000. "Socioeconomic Background and Vietnamese War Mortality during Vietnam's Wars." <i>Demography</i> 37:1-17. Hirschman, Charles, Samuel Preston, and Vu Manh Loi. 1995. "Vietnamese Casualties during the American War: A New Estimate." <i>Population and Development Review</i> 21:783-812.
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	Life tables: single decrement Rowland 8.1-8.5
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	PHG 3.1-3.5
Feb 24 (PS #4 due)	Life tables: single decrement (con't) Special Topic: life expectancy decomposition by age PHG 3.6-3.11
	Life tables: single decrement (con't) Special Topic: applications of life table techniques Elo, Irma T. 2001. "New African American Life Tables from 1935-1940 to 1985-1990." <i>Demography</i> 28(1):97-114. Luy, M. 2003. "Causes of Male Excess Mortality: Insights from Cloistered Populations." <i>Population and Development Review</i> . 29(4):647-676.
Mar 2 (PS #5 distributed)	<i>Lab for single decrement life table</i>
	Life tables: multiple decrement PHG 4.1-4.4
Mar 9 (PS #5 due)	Life tables: multiple decrement (con't) Special Topic: Life expectancy decomposition by age and cause of death PHG 4.5-4.7
	Life tables: multiple decrement (con't) Special Topic: application King, Rosalind Berkowitz. 1999. "Time Spent in Parenthood Status among Adults in the United States." <i>Demography</i> 36:377-385. Harris, Kathleen Mullan. 1993. "Work and Welfare among Single Mothers in Poverty." <i>American Journal of Sociology</i> 99:317-352.
Mar 23 (PS #6 distributed)	<i>Lab for multiple decrement life table</i>
	Measures of fertility Rowland 7.1-7.8
Mar 30 (PS #6 due) (PS #7 distributed)	Measures of fertility (con't) PHG 5.1-5.5

	<p>Special Topic: Critique of Cohort Approach to Fertility Bhrolchain, Marie Ni. 1992. "Period Paramount? A Critique of the Cohort Approach to Fertility." <i>Population and Development Review</i> 18:599-630.</p>
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	<p>Measures of fertility (con't)</p> <p>Special Topic: Tempo and Quantum Bongaarts, John and Griffith Feeney. 1998. "On the Quantum and Tempo of Fertility." <i>Population and Development Review</i> 24:271-292.</p> <p>Schoen, Robert. 2004. "Timing Effects and the Interpretation of Period Fertility." <i>Demography</i> 41(4):801-819.</p> <p>Lutz, Wolfgang and Vegard Skirbekk. 2005. "Policies Addressing the Tempo Effect in Low-Fertility Countries." <i>Population and Development Review</i> 31:699-720.</p>
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<p>April 6 (PS #7 due)</p>	<p>Measures of migration</p> <p>Rowland 11.1-11.8</p>
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	<p>Measures of migration (con't)</p> <p>Special Topic: The New Immigrant Survey Jasso, Guillermina, Douglas S. Massey, Mark R. Rosenzweig, and James P. Smith. 2000. "The New Immigrant Survey Pilot (NIS-P): Overview and New Findings about U.S. Legal Immigrants and Admission." <i>Demography</i> 37:127-138.</p> <p>Special Topic: Measuring the Number of Illegal Immigrants in the United States <u>Yearbook of Immigration Statistics</u> --How many immigrants were admitted to the U.S. in 1996? More males or females admitted? Browse site to see range of resources available.</p>
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<p>April 13 (PS #8 distributed)</p>	<p>Population projection</p> <p>Rowland 12.1-12.7</p>
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	<p>Population projection (con't)</p> <p>PHG 6.1-6.4</p>
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<p>April 20 (PS #8 due)</p>	<p>Population projection (con't)</p> <p>Special Topic: The National Academies Report on Population Projection National Research Council, 2000. <i>Beyond Six Billion</i>, Washington D.C.: National Academy of Sciences Press. Introduction.</p> <p>Special Topic: Including Migration in Population Projections Morrison, Peter. 2000. "Forecasting Enrollments for Immigrant Entry-Port School Districts." <i>Demography</i> 37:499-510.</p> <p><i>Also see:</i> -- <u>United Nations World Population Prospects</u></p>
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	Review
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Sociology 7753 (new course): unanimously approved with one contingency and three recommendations

- *Contingency: No details are provided for any of the assignments. Request to describe problem sets & presentations/discussion.*

The problem sets and presentations/discussion are now described in the syllabus (page 2). We can provide the committee with actual examples of the problem sets if desired.

- *Recommendations:*
 - o *Include the link to the Code of Student Conduct in the statement on academic misconduct: <http://studentlife.osu.edu/csc/>*

Included in the revised syllabus.

- o *Use standard statement about disability services (since it is ODS that determines which accommodation is necessary). See p. 14 of the ASC Curriculum and Assessment Operations Manual: <http://asccas.osu.edu/sites/asccas.osu.edu/files/asc-curr-assess-operations-manual.pdf>*

Included in the revised syllabus.

- o *Syllabus states that knowledge of calculus and matrix algebra is advantageous but not required. How much knowledge of calculus and matrix algebra is recommended? It might be beneficial for the students to elaborate a little bit.*

In the revised syllabus we have clarified how much knowledge is recommended: “Knowledge of calculus and matrix algebra is advantageous but not required. In this class, we will learn to understand population dynamics in discrete time fashion. But we may sometimes apply the elementary concepts of differential and integral calculus to the study of population dynamics in continuous time fashion with or without age differentiation.”