

SOCI 626 Demographic Methods
Fall 2016
Mondays 12:35pm-2:25pm
Peterson 310

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Office hours: Wednesdays 3-5pm or by appointment

Course description:

This is a survey course in techniques that are widely used in demographic analysis. These include techniques that describe population structure, analyze demographic dynamics, and evaluate demographic data. The aim of this course is to introduce you to these various demographic methods, to understand their strengths and weaknesses, and to see how these techniques may be applicable to your own research.

There are no specific pre-requisites for this course. I will assume you have a basic knowledge of demography and social science research. If you have not had a specific class in demography you may want to pick up a textbook to use as a reference (e.g. Weeks, John R. 2012. *Population: An Introduction to Concepts and Issues*.). The library has some of these books on its shelves.

Some basic math skills (adding, subtracting, division, multiplication, exponentiation, etc) are necessary to be successful. You do not need to be a “stats” person, only willing to look at and work with tables, numbers, and simple formulae.

Course website:

We will make use of the course website through myCourses. Readings not in the text book may be posted there and I will use the email feature for most email communications.

Required text:

Rowland, D. T. 2003. *Demographic Methods and Concepts*. Oxford: Oxford University Press. Available for purchase at the McGill Bookstore. A copy of the book is also on reserve in the library.

This book comes with a CD containing additional exercises. Some of these will be included in the homework.

Additional readings can be found electronically through myCourses or the library. If not, they will be made available to students either through the myCourses website or as an email attachment.

You will need a calculator for this class. Most, if not all, the calculations will only require a basic calculator.

You may want to download *Population Handbook* from the Population Reference Bureau to use as an additional reference. <http://www.prb.org/Publications/Reports/2011/prb-population-handbook-2011.aspx>

Course requirements: The course requirements are non-negotiable. If you know you cannot meet them, do not take this course.

1. Mid-term Exam (30%). There will be one mid-term exam on Oct 16th. This is an in-class, closed-book exam and will cover all material presented up to this date.

2. Final Exam (35%). There will be a cumulative, closed-book final exam administered during the last class period.
3. Homework (20%). There will be 6 homework assignments throughout the semester. Every student must turn in their own assignment, but I encourage students to work together on completing them. These are graded Satisfactory or Unsatisfactory.
4. Methodological application essay (15%). Students will write a short essay (~1,000 words not including references) applying one of the methods we learn in class to a substantive area of their own interest. Essays should clearly present the substantive research question, the method of focus, and necessary data needs (and whether these data exist or not). Essays are due mid-way through the final exam period (Monday, April 25th, 8pm).

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

« Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue). »

Grading:

Mid-term Exam	29%	A	85-100%
Final Exam	35%	A-	80-84%
Homework	21%	B+	75-79%
Methodological application essay	15%	B	70-74%
	100%	B-	65-69%
		C+	60-64%
		C	55-59%
		D	50-54%
		F	0-49%

POLICIES

Remise des travaux en français.

Les étudiants de ce cours peuvent rédiger tous leurs travaux (incluant les examens) en français, mais doivent pour ce faire obtenir la **permission préalable** de la professeure. **Aucune permission rétroactive ne sera accordée.**

Make-up exam policy.

Note: The exams cannot be made up. They are scheduled for the regular class time and you are therefore expected to be there. If you know you will miss either exam do not take this course.

Email. There are two key points regarding email for this class.

- To communicate with you I will most likely use the email tool on the course website on myCourses. It is your responsibility to check this email account (or have it forwarded to an account you use more regularly). It is also your responsibility to ensure that I receive any messages from you. I recommend sending messages through the course website to ensure your messages to me from a non-McGill account are not mistaken as SPAM.
- Email is a written document and should be treated as a permanent record of communication. Each email should be addressed specifically and include your name as a closing. I will not respond to emails that are not written in complete English (e.g. no texting shortcuts).

Tardiness. Tardiness, arriving late to class, will not be tolerated. Students who are more than 10 minutes late to class will not be allowed to attend that day. Students repeatedly arriving late to class will be asked to withdraw from the course. If the time of this class is too difficult for you to accommodate then you need to find another class.

Leaving early. Leaving class early will not be tolerated. If you have other commitments that prevent you from being in class the entire time then you need to find another class. Students repeatedly leaving early will be asked to withdraw from the course.

Cell phones and other electronic devices. The use of cell phones and similar electronic devices is not allowed in class. Use includes texting, checking Facebook, and other similar activities. If a cell phone “goes off” (e.g. rings, buzzes, beeps, vibrates) in any manner the student will be asked to leave the class immediately. Any student who uses a phone or similar device in class may be asked to leave class immediately. Re-admittance into the class at a later date is at the professor’s discretion. Students who repeatedly use unapproved electron devices will be asked to withdraw from the course. Laptops will be permitted but if I find their presence distracts from the learning environment of the class I will ban them.

Using your phone’s calculator for calculations during class or an exam is the only exception.

Academic misconduct. “McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/integrity for more information).”

«L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/integrity).” »

Academic misconduct of any sort will not be tolerated. If I find evidence of any academic misconduct for any activity in this class I will report the offense to the Office of the Dean of Students and they will determine the appropriate sanction.

Academic misconduct includes, but is not limited to deceptive acts such as the following: cheating, fabrication (lying), falsification, multiple submission, plagiarism, complicity, or violation of departmental or college rules. Signing in for another student on an attendance sheet is considered academic misconduct.

Attendance and participation in class discussions.

You are responsible for all announcements made in class and on MyCourses, as well as for all course materials given out in class. You should also check for new announcements or material on MyCourses at least weekly.

Policy Concerning the Rights of Students with Disabilities

“If you have a disability please contact the instructor to arrange a time to discuss your situation. It would be helpful if you contact the Office for Students with Disabilities at 398-6009 before you do this.”

Policy for the Accommodation of Religious Holy Days

“1 Students are not to be penalized if they cannot write examinations or be otherwise evaluated on their religious holy days where such activities conflict with their religious observances. (...)

2 Students who because of religious commitment cannot meet academic obligations, other than final examinations, on certain holy days are responsible for informing their instructor, with two weeks’ notice of each conflict. (...)

3 When the requested accommodation concerns a final examination, students are responsible for advising their faculty office as soon as possible and not later than the deadline for reporting conflicts. Additional documentation confirming their religious affiliation may be requested.” (Approved by Senate - November 20, 1996 - Minute 92)

Important Dates:

Tuesday, January 20: Add/drop deadline

Monday, October 17: Mid-term exam

Monday, December 5: Final exam

Monday, December 12: Methodological application essay due

In the event of extraordinary circumstances beyond the University’s control, the content and/or evaluation scheme in this course is subject to change.

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Course Outline (subject to change)

Week 1. September 2.

Introduction: demographic data, growth, rates, and probabilities

Rowland Chapters 1 and 2

Recommended:

Canada, Statistics. 2010. "2011 Census - About the Census: History of the Census of Canada." Retrieved August 27, 2013 (<http://www12.statcan.gc.ca/census-recensement/2011/ref/about-apropos/history-histoire-eng.cfm#a9>).

Duncan, G.J. 2008. "[When to Promote, and When to Avoid, a Population Perspective.](#)" *Demography* 45(4): 763-784.

Merli, M.G. and A.E. Raftery. 2000. "[Are Births Underreported in Rural China? Manipulation of Statistical Records in Response to China's Population Policies.](#)" *Demography* 37(1): 109-126.

Rehner, R.R., F.R. Furstenburg, A.A. Belzer. 1999. "[How Much Do We Count? Interpretation and Error-Making in the Decennial Census.](#)" *Demography* 36(1):121-134.

Yu Xie. 2000. "[Demography: Past, Present, and Future.](#)" *Journal of American Statistical Association* 95: 670-673.

Week 2. September 12.

Age-sex composition

Rowland Chapter 3

Recommended:

Knodel, J. 1999. "[Deconstructing Population Momentum.](#)" *Population Today* 27(3):1-27.

Week 3. September 19.

HW 1 Demographic data due

Standardization, periods, and cohorts

Rowland Chapter 4

Recommended:

Frejka and Calot. 2001. "[Cohort Reproductive Patterns in Low-Fertility Countries.](#)" *Population and Development Review* 27(1): 103-132.

Heilig, G.K. 2006. "[Many Chinas? The economic diversity of China's provinces.](#)" *Population and Development Review* 32(1):147-161.

Jasso (1985) "[Marital coital frequency and the passage of time: Estimating the Separate Effects of Spouses' Ages and Marital Duration, Birth and Marriage Cohorts, and Period Influences.](#)" *American Sociological Review*, 50(2):224-241.

Jasso (1986) "[Is It Outlier Deletion or Is It Sample Truncation? Notes on Science and Sexuality.](#)" *American Sociological Review*, 51(5):738-742.

Kahn & Udry (1986) "[Marital Coital Frequency: Unnoticed Outliers and Unspecified Interactions Lead to Erroneous Conclusions.](#)" *American Sociological Review*, 51(5):734-737.

Lam, David, Deborah Levison. 1992. "[Age, Experience, and Schooling: Decomposing Earnings Inequality in the United States and Brazil.](#)" *Sociological Inquiry*, 62 (2): 220-245.

Park, J. and D. Myers. 2010. "[Intergenerational Mobility in the Post-1965 Immigration Era: Estimates by an Immigrant Generation Cohort Method.](#)" *Demography* 47(2):369-392.

Ryder, N. 1965. "[The Cohort as a Concept in the Study of Social Change.](#)" *American Sociological Review* 30(6):843-861.

Smith, Morgan & Koropeckyj-Cox. 1996. "[A decomposition of trends in the nonmarital fertility ratios of blacks and whites in the United States, 1960-1992](#)" *Demography* 33(2):141-151.

Yang, Yang. 2008. "[Social Inequalities in Happiness in the US 1972-2004: An Age-Period-Cohort Analysis](#)." *American Sociological Review* 73: 204-226.

Week 4. September 26.

HW 2 Standardization due

Mortality

Rowland Chapter 6

Recommended:

Murray & Lopez. 1997. "[Mortality by cause for eight regions of the world: Global Burden of Disease Study](#)." *The Lancet* 349(9061):1269-76.

Preston, S.H. & H. Wang. 2006. "[Sex mortality differences in the United States: The role of cohort smoking patterns](#)." *Demography*, Volume 43: 631-646

Week 5. October 3.

HW 3 Mortality due

Catch up and review

October 10. Thanksgiving. No class.

Week 6. October 17.

Mid-term exam

Week 7. October 24.

Fertility

Rowland Chapter 7

Recommended:

Bhrolcháin, M.N. 2011. "[Tempo and the TFR](#)." *Demography* 48(3): 841-861.

Goldstein, Joshua R., Toma Sobotka & Aiva Jasilioniene. 2009. "[The end of lowest-low fertility?](#)" *Population and Development Review* 35(4):663-699.

Schoen, R. 2004. "[Timing Effects and the Interpretation of Period Fertility](#)." *Demography* 41(4): 801-819.

Stover, John. (1998) "[Revising the Proximate Determinants of Fertility Framework: What Have we Learned in the Past 20 years?](#)" *Studies in Family Planning* 29:255-267.

For additional background you may want to also read: Bongaarts, J. and G. Feeney. 1998. "[On the Quantum and Tempo of Fertility](#)." *Population and Development Review* 24(2): 271-291.

Week 8. October 31.

Family

Chapters 8 and 9 in Newell, Colin. 1988. *Methods and Models in Demography*, New York: Guildford Press. (pdf available on myCourses)

Recommended:

Lam and Marteleto. 2008. "[Stages of the Demographic Transition from a Child's Perspective](#)." *Population and Development Review* 34: 225-252.

Joshua Goldstein & Catherine Kenney. 2001. "[Marriage Delayed or Marriage Forgone? New Cohort Forecasts of First Marriage for U.S. Women](#)." *ASR* 66(4):506-519.

Steven Ruggles & Susan Brower. 2003. "[Measurement of household and family composition in the United States, 1850-2000](#)." *Population and Development Review* 29(1):73-101.

Week 9. November 7.

HW 4 Fertility and family due

Life tables

Rowland Chapter 8

Recommended:

Bloom, D. and D. Canning. 2000. "[The Health and Wealth of Nations](#)" *Science* 287:1207-1209.

Eloundou-Enyegue, P. 2004. "[Pregnancy-Related Dropouts and Gender Inequality in Education](#)." *Demography* 41(3): 509-528.

Schoen, Landale, Daniels, and Cheng. 2009. "[Social Background Differences in Early Family Behavior](#)." *Journal of Marriage and Family* 71 (May 2009): 384-395

Wildeman, C. 2009. "[Parental Imprisonment, the Prison Boom, and the Concentration of Childhood Disadvantage](#)." *Demography* 46(2):265-280.

Week 10. November 14.

HW 5 Life tables due

Stable and stationary models

Rowland Chapter 9

Recommended:

Alho, J.M. 2008. "[Migration, Fertility, and Aging in Stable Populations](#)." *Demography* 45(3): 641-650.

Preston, S.H. 1982. "[Relations between Individual Life Cycles and Population Characteristics](#)." *American Sociological Review* 47(2): 253-264.

Week 11. November 21

HW 5 Stable and stationary models due

Migration

Rowland Chapter 11

Recommended:

Basia Zaba. 1987. "[The Indirect Estimation of Migration: A Critical Review](#)," *International Migration Review*, Special Issue: Measuring International Migration: Theory and Practice. Vol. 21, No. 4: 1395-1445.

Population Reference Bureau. 2007. "[World Population Highlights](#)," *Population Bulletin* 62, no. 3.

Ronald Skeldon. 1987. "[Migration and the Population Census in Asia and the Pacific: Issues, Questions and Debate](#)," *International Migration Review*, Special Issue: Measuring International Migration: Theory and Practice. 21, No. 4: 1074-1100.

Yinger, Nancy V. 2007. *The Feminization of Migration: Limits of the Data*. Population Reference Bureau.

(<http://www.prb.org/Publications/Articles/2007/FeminizationofMigrationLimitsofData.aspx>)

or **Population projections**

Rowland Chapter 12

Week 12. April 5.

HW 7 Migration/population projections due

Catch up and review

Week 13. April 12.

Final exam