

Syllabus

for course at advanced level

Basic Demographic Methods

Grundläggande demografisk metod

7.5 Higher Education

Credits

7.5 ECTS credits

Course code:	SO7111
Valid from:	Autumn 2017
Date of approval:	2016-04-26
Department	Department of Sociology
Main field:	Demography
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

The syllabus is approved by the Board of the Department of Sociology as of April 26 2016.

Prerequisites and special admittance requirements

Bachelors' degree, English 6

Course structure

Examination code	Name	Higher Education Credits
1D12	Basic Demographic Methods	7.5

Course content

Basic Demographic Methods (BDM), a course at advanced level, aims to develop students' analytical and interpretative skills by familiarizing them with basic concepts and measures of mortality, fertility, and migration as well as basic demographic methods such as life tables, standardization and population forecasting. Such knowledge is essential for work with statistical materials on populations and will be useful for most quantitative social science. As the course is based on the idea of learning by doing, attendance is essential to attain the learning outcomes.

Learning outcomes

Upon the completion of the course, the student is expected to be able to:

In terms of knowledge and understanding: -Account for, interpret and discuss the validity of the following:

- *Simple ratios, probabilities and rates, crude and specific rates
- *Lexis diagram
- *Direct and indirect standardization
- *Cohort life table
- *Period life table
- *Reproduction rates, parity progression rates, life table applications of family dynamics
- *Life table application of migration *Basic cohort-component population projection

In terms of accomplishments and competence:

-Use, describe, present and compare the following:

- *Simple ratios, probabilities and rates, crude and specific rates
- *Lexis diagram

- *Direct and indirect standardization
- *Cohort life table
- *Period life table
- *Reproduction rates, parity progression rates, life table applications of family dynamics
- *Life table application of migration *Basic cohort-component population projection
- Link theory and demographic methods that are appropriate for a specific demographic research question.

In terms of attitudes and values:

- Search for, compare and critically review demographic data relevant for a particular research question;
- Compare and evaluate basic methods used in research on demographic questions;
- Carry out work in a responsible way, including keeping realistic time schedules.

Education

The course is provided at full-time basis over 4.5 weeks. Teaching and learning is conducted through lectures, seminars, lab and home exercises, and a final exam.

Forms of examination

The assessment consists of eight (home/lab) exercises and one exam. Exercise 8 (in lab) on population projections and the exam require obligatory attendance. The eight exercises consist of using, describing, presenting, comparing, as well as accounting for, interpreting and discussing the validity of the following:

- 1) Simple ratios, probabilities and rates, crude and specific rates.
- 2) Lexis diagram
- 3) Direct and indirect standardization
- 4) Cohort life table
- 5) Period life table
- 6) Reproduction rates, Parity progression rates, life table applications of family dynamics
- 7) Life table application of migration
- 8) Basic cohort-component population projection (obligatory attendance)

All eight exercises need to be handed in for the fulfilment of the course. A passing score for each exercise is 3. Students who fail to pass an exercise have an opportunity to redo and resubmit the exercise within two weeks. A re-submitted exercise has a chance of being upgraded to 3. To achieve a "Pass" for this course, students are expected to receive a "Pass" in all eight exercises and the exam. The weight of exercises and the exam in the final assessment is 50% each.

The student's final achievement (based on their performance in the eight home/lab exercises and the exam) is graded to A=Excellent, B=Very good, C=Good, D=Satisfactory, E=Sufficient, Fx=Not sufficient, F=Fail.

Clean lay-out and clear, convincing and correct interpretations are necessary for a high grade in the exercises and the exam. Students with a final grade of Fx or F are entitled to redo the examination as long as the course is provided in order to achieve grade E at least. A student with E is not entitled to another examination to raise his/her grade. Students who received grade Fx or F on exams twice from the same examiner can request to be evaluated by another examiner on the next occasion. Such request should be sent to the Director of Studies. The next chance to redo the course will be the next time the course is offered (every autumn).

Plagiarism, cheating and unauthorized collaboration (collusion)

As a student, you are responsible for knowing the regulations in relation to examinations and similar situations. Extensive information is available at the website of the Department of Sociology as well as the Stockholm University website (www.su.se/rules). Teachers are obliged to report suspected cheating or plagiarism. If suspicions can be confirmed it will be brought before the Disciplinary Committee and may lead to suspension. Example of plagiarism is to copy a text or sentences, word by word or close to, without referring to the source. This applies also to text of your own previous writing. Cheating includes bringing unauthorized aids to a sit-in exam, such as mobile phones. To form study groups together with fellow students is enriching and time saving, but when it comes to examinations you need to be meticulous about working independently (if not otherwise instructed) to avoid collusion.

Interim

Students can request to have examination according to this syllabus up to three semesters after it has ceased to be valid. Such request should be sent to the Director of Studies.

Limitations

No admission to the course is possible for anyone who has passed the course SO7110 Basic Demographic Methods 7.5 credits or the course SO7115 Measurement Techniques and Demographic Methods 7.5 credits or the course unit Basic Demographic Methods 7.5 credits within the course SO8040 Demography,

Required reading

Main literature

Santow, Gigi (1996). Demographic Methodology II. Stockholm University Demography Unit. (To be purchased at Akademibokhandeln).

Rowland, D T. (2003). Demographic Methods and Concepts. Oxford University Press. Oxford.

Additional readings (Reference, not compulsory)

Hartman, Michael (2007). Demographic Methods for the Statistical Bureau. Statistics Sweden. (To be purchased at the student office).

Weeks, John (2008). Population: An Introduction to Concepts and Issues. Wadsworth. Tenth edition. Chapter 4 on Demographic data, pp. 108-145; pp. 176-185, Measuring mortality; pp. 234-241, Measuring fertility.

Preston, Samuel, Patrick Heuveline, and Michel Guillot (2001). Demography: Measuring and Modeling Population Processes.

Additional readings on fertility analysis (Reference, not compulsory)

Ryder, N. 1986. Observations on the history of cohort fertility in the United States. Population and Development Review 12: 617-643.

Ní Bhrolcháin, M., 1992. Period paramount? A critique of the cohort approach to fertility. Population and Development Review 18: 599-629.

Van Imhoff, E., 2001. On the impossibility of inferring cohort fertility measures from period fertility measures. Demographic Research [Online] 5. Available <http://www.demographic-research.org/Volumes/Vol5/2>.

Additional readings on life-table estimation Compulsory

Andersson, Gunnar and Dimitar Philipov, 2002. "Life-table representations of family dynamics in Sweden, Hungary, and 14 other FFS countries: A project of descriptions of demographic behavior". Demographic Research 7(4): 67-144. Available <http://www.demographic-research.org/Volumes/Vol7/4>.

Readings on population projections Compulsory

O'Neill et al. (2001). A guide to global population projections. Demographic Research 4(8). <http://www.demographic-research.org/volumes/vol4/default.htm>

Reference for Swedish-readers (highly recommended but not compulsory)

Hofsten, Erland, 1982. Demografins grunder, Lund: Studentlitteratur, chapter 4.1-4.7 samt kap 4.10-4.11 (25 pages). Voluntary reading for students who read Swedish.