Revised March 16, 2012

(103) POPULATION, GROWTH, AND COMPOSITION
(Population Size and Population Change)

Spring 2012

SYLLABUS

Instructor: Ayman Zohry, PhD.
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Class time and location: Sunday from 02:00 to 3:30pm and 03:45 to 05:15pm

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Course Description:

This course focuses on the basic measures of population size, distribution, and composition and the measures of population change and their associated literature in the field of demography. The course covers an array of topics and methods and aims at familiarizing students with the demographic concepts related to these basic topics. The course is composed of two main parts as follows:

(a) Population Size, Distribution and Composition

This part covers the following topics: Population size: concept of total population, time reference and completeness of coverage; Population Distribution: demographic areas, administrative and statistical area, population density, the urban-rural classification, other classifications; Measures of population distribution; Population composition: sex composition, age composition, marital status, family groups, educational characteristics ...etc; and Techniques of analysis.

(b) Population Change

This part covers the following topics: Definition and types of population change, population direction, absolute and percentage change; Measures of population change; Description of trends; Accuracy of measures; and Components of population change.

Objectives and Learning Outcomes:

By the end of this course, students will be able to:

1. Acknowledge the importance of the analysis of population size and change and recognize the importance of such analysis in their own research in the future,
2. Calculate measures related to population size, distribution and composition using real data,
3. Calculate measures related to population change using different methods and approaches, and
4. Read, understand, and utilize demographic literature related to population size and change.

Teaching Method

The topics in this course will be covered through a variety of methods. Although I will cover some course material through a standard lecture format, my goal is to lecture as little as possible. Research has shown that the lecture format is not a particularly effective way of learning. Rather than simply sitting and listening, I expect students to become actively involved in the course. Typically, student involvement comes from asking questions and engaging in class discussion. In addition to class discussions, we will engage in a number of activities such as case studies, and in-class exercises, which are designed to provide "hands-on" learning of key course concepts. Basically, my teaching philosophy is to get you as actively involved in the course as possible by having you do things and to think about what you are doing. This type of approach is an effective way to learn course material. However, it is not easy. Active learning requires students to come prepared and ready for class, remain open-minded, and exert considerable mental energy.

Course Prerequisites: None

Student Evaluation/Grading

This is an interactive class and does it is critical that you participate fully from the beginning in readings and discussions.

Final grades for the course will be calculated as follows:

Attendance	10%
Classroom discussions, participation, and presentations	20%
Mid-term exams	30%
Final exam	40%

Classroom discussions, participation, and presentations: Participation will consist of your contributions to class discussion, your effort and attitude in any in-class exercise, and your performance on any quizzes, reaction/discussion papers, and/or homework assignments.

Mid-term exams: Two mid-term exams will be administered; one for each part of the course. Mid-term exams will be administered on 4 March 2012 and 22 April 2012. The mid-term exams will be administered in the first half of the lecture – from 2pm till 3:30pm. Lectures continue right after the exams. The mid-term exams count for 30% of the overall evaluation of the course

Final exam: The final exam will take place in July 2012 – specific date will be announced later. It will cover all topics discussed through out the course. The mid-term exam counts for 40% of the overall evaluation of the course.

Course Text and Readings:

The mains textbook is,

1. Siegel, J. & Swanson, D. (Eds.). (2004) *The Methods and Materials of Demography* (2nd edition). Elsevier Academic Press, London.

There are many other good textbooks and references in demographic methods. Here a list of some that may be useful,

1. Barcley, George. 1958. *Techniques of Population Analysis*. New York: Wiley.
2. Hind, Andrew. 1998. *Demographic Methods*. London. Arnold.
3. Namboodiri, Krishnan. 1991. Demographic Analysis: A Stochastic Approach. San Diego: Academic.
4. Palmore, James A., and Robert W. Gardner. 1994. *Measuring Mortality, Fertility and Natural Increase: A Self-Teaching Guide to Elementary Measures*. Fifth Edition. Honolulu: East West Center.
5. Pressat, Roland. 1972. *Demographic Analysis*. Chicago: Aldine.

6. Weeks, John. 2002 *Population: An Introduction to Concepts and Issues*. Belmont, CA: Wadsworth.

We will also read some research articles related to the topics covered by the course. One set of the assigned readings (i.e., articles) will be available for you to copy or borrow in the library. Most of the articles are also available online for downloading.

Library, Use of Computer, and Online Resources

Within the term, we will use real data available in the census returns and the Demographic Yearbook available in the CDC library. In addition we will use computer software packages such as Population Pyramids software package and other related programs. Students are highly encouraged to use the available online resources related to the topics of this course.

Course Schedule and Reading Assignments (May be adjusted as necessary)

* Required readings

February 5	**1**	**Overview of the Course** **Population Size**
	*	Siegel, J. & Swanson, D. Chapter 4 ; pp :65-80.
		Part I: Population Size: Distribution and Composition
February 12	**2**	**Population Distribution: Geographic Areas**
	*	Siegel, J. & Swanson, D. Chapter 5 ; pp :81-104.
		Eng, Pang Chin (2009) Geographic Distribution of the Singapore Resident Population, *Statistics Singapore Newsletter*, Statistics Singapore.
February 19	**3**	**Population Distribution: Classification of Residence**
	*	Siegel, J. & Swanson, D. Chapter 6 ; pp :105-124.
		Demographia (2011) *World Urban Areas: World Agglomerations*, Demographia.
February 26	**4**	**Age and Sex composition**
	*	Siegel, J. & Swanson, D. Chapter 7 ; pp :125-174.
		Population Reference Bereau (2011) *2011 world Population Datasheet*, PRB.
March 4	**5**	**Mid-term Exam - Part I** **Age and Sex composition (Cont'd)**

		United Nations Population Fund (2011) *State of World Population 2011: People and Possibilities in a World of 7 Billion*, UNFPA.
March 11	**6**	**Age and Sex composition (Cont'd)** **Racial and Ethnic Composition**
	*	Siegel, J. & Swanson, D. Chapter 8 ; pp :175-190.
		Morning, Ann (2008) Ethnic Classification in Global Perspective : A Cross-National Survey of the 2000 Census Round, *Population Research Policy Review*, 27: 239-272.
March 18	**7**	**Marriage, Divorce, and Family Groups**
	*	Siegel, J. & Swanson, D. Chapter 9 ; pp :191-210.
		Rashad, Hoda, Magued Osman, and Farzaneh Roudi-Fahimi (2005) *Marriage in the Arab World*, Population reference Bureau.
March 25		**Conference Travel - No Lecture**
April 1	**8**	**Educational Characteristics**
	*	Siegel, J. & Swanson, D. Chapter 10 ; pp :211-252.
		Part II: Population Change
April 8	**9**	**Definition and Types of Population Change**
	*	Siegel, J. & Swanson, D. Chapter 11 ; pp :253-264.
April 22	**10**	**Methods of Measuring Population Change**
	*	Siegel, J. & Swanson, D. Chapter 11 ; pp :253-264.
April 29	**11**	**Mid-term Exam – Part II** **Components of Population Change**
	*	Siegel, J. & Swanson, D. Chapter 11 ; pp :253-264.
May 6	**12**	**Accuracy and Important Factors in the Analysis of Change**
	*	Siegel, J. & Swanson, D. Chapter 11 ; pp :253-264.