

## **Population Economics [CRN 15744]** **Course Outline and Reading List**

### **[I] Introduction**

This is a course in population economics. Topics include: world population growth and the elements of formal demography; the causes of population growth (analysis of the demographic transition); consequences of population growth (Malthusian theory, Malthusian versus modern economic growth, interaction of population and environment); migration, economic convergence and urbanization; and age structure and aging.

My office hours are 10:00 am to 11:20 am on Mondays and Thursdays. My office is 378 Business and Economics Building, on the third floor. I will meet students outside of these hours but only by appointment (please see me at the end of lecture for an appointment.) Because I find to answer questions via e-mail, I discourage students from making enquiries or asking informational questions through e-mail. Moreover, I do not guarantee that I will respond to e-mail.

A copy of this course outline is available on my personal homepage. The homepage address is: <http://web.uvic.ca/~mosk/mosk-hp.html>.

### **[II] Administrative Matters**

*It should be stressed that performance in this course depends upon your ability to read and write. For this reason, it is strongly recommended that you complete Economics 225 (Writing for Economists) before you enroll in this course.*

There will be two midterms, the first scheduled for **October 5 (Monday)** and the second for **November 2 (Monday)**. The numerical score for the semester's midterm performance will be obtained by taking the higher of the two midterm scores, that for October 1 and that for October 29.

Examinations consist of identification questions and essay questions, and draw upon both the reading and the lecture material. Please note that it is **not** expected that you master the highly technical (mathematical and statistical) material that appears from time to time in the readings. The emphasis in examination is on demonstrating your mastery of basic concepts and ideas developed in both lectures and readings.

In grading I use the following method: I calculate the total numerical score on the midterm and on the final (there are 100 points possible on each examination); I multiply the midterm score by .4 and the score on the final by .6; I add these weighted scores to secure a mark out of 100. I assign letter grades based on the total numerical score out of 100. The numerical ranges for the grades are as follows:

90 and up: A+	85-89: A	80-84: A-
75-79: B+	70-74: B	65-69: B-
60-64: C+	55-59: C	50-54: D
0-49: E or F		

Regarding the procedure of “rounding off” non-integer values of the total numerical score for the course I proceed as follows:

If “x.y” is a non-integer (e.g. 56.7 with x = 56 and y = 7), I proceed as follows: I round up when y is 5 or greater than 5. Thus taking into account non-integer values, the “cut-offs” are as follows: 49.5 to 49.9 becomes 50, earning a D; 54.5 to 54.9 becomes 55, earning a C; 59.5 to 59.9 becomes 60, earning a C+; 69.5 to 69.9 becomes 70, earning a B; 74.5 to 74.9 becomes 75, earning a B+; 79.5 to 79.9 becomes 80, earning a A-; 84.5 to 84.9 becomes 85, earning an A; 89.5 to 89.9 becomes 90, earning an A+.

**This is the sole basis for determining grades in this course** (for procedures regarding recognized medical absences on midterms, see the reading list for the course.) Midterm examinations will be returned in class, once grading is complete; final examinations are available for viewing at University Centre after grading is completed (students should check with University Centre regarding procedures to see their final examinations.)

I do not report grades through e-mail, nor do I do not discuss my grading procedures through e-mail.

Students should make note of the following policy adopted by the Department of Economics:

**Plagiarism and Cheating:** The standards and reputation of a University are the shared responsibility of its faculty and students. Students are expected to observe the same standards of scholarly integrity as their academic and professional counterparts.

Plagiarism and cheating are considered to be serious breach of academic integrity and shall be dealt with as such by the Department of Economics.

Please see the University Calendar for examples of plagiarism.

Students should also be aware of the following University policy:

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.

Students are advised not to make travel plans until after the examination timetable has been finalized. Students who wish to finalize their travel plans at an earlier date should book flights that depart after the examination period (see the University Calendar.) There will be no special accommodation if travel plans conflict with the examination.

### **[III] Readings**

There are no textbooks required for purchase. In lieu of a textbook, there is a coursepack/reader that contains all the required readings. This coursepack/reader can be purchased from the university bookstore.

The table of contents for the coursepack/reader is as follows:

## **Table of Contents**

### **Part I: World Population Growth and Formal Demography**

**Massimo Livi-Bacci**

*Population and Nutrition: An Essay on European Demographic History*

**W. W. Rostow**

*The Great Population Spike and After: Reflections on the 21<sup>st</sup> Century*

**Nathan Keyfitz**

*Introduction to the Mathematics of Population*

### **Part II: The Causes of Population Growth**

**Ronald Lee**

“The Demographic Transition: Three Centuries of Fundamental Change” in *Journal of Economic Perspectives*, Vol. 17, #4: 167-190.

**James R. Carey and Debra S. Judge**

“Life Span Extension in Humans is Self-Reinforcing: A General Theory of Longevity,” in *Population and Development Review*, Vol. 27, #3: 411-436.

**Laurie Garrett**

*The Coming Plague: Newly Emerging Diseases in a World out of Balance*, pp. 411-419, pp. 457-461, pp. 550-563.

**Anne Mills and Sam Shillcutt**

“Communicable Diseases,” in Bjørn Lomborg (ed), *Global Crises, Global Solutions*, pp. 62-67 and 87-95.

**Marvin McInnis**

“Women, Work, and Childbearing: Ontario in the Second Half of the Nineteenth Century,” in Douglas McCalla and Michael Huberman, *Perspectives on Canadian History*, pp. 280-302.

**John C. Brown and Timothy W. Guinnane**

“Regions and Time in the European Fertility Transition: Problems in the Princeton Project’s Statistical Methodology,” *Economic History Review*, 60 (3): pp. 574-595.

**Lorraine Donaldson**

*Fertility Transition: The Social Dynamics of Population Change*, pp. 68-87.

## **Part III: The Consequences of Population Growth**

**Thomas Robert Malthus**

*An Essay on the Principle of Population*, pp. 151-165.

**Alberto Alesina and Enrico Spolaore**

*The Size of Nations*, pp. 1-6, pp. 155-167, pp. 172-173.

**Joel Mokyr**

*The Lever of Riches: Technological Creativity and Economic Progress*, pp. 81-112.

**Robert J. Barro and Xavier Sala-I-Martin**

*Economic Growth*, pp. 16—29, pp. 285-291, pp. 382-393.

**Gary D. Hansen and Edward C. Prescott**

“Malthus to Solow,” in *The American Economic Review*, Vol. 92, #4: 1205-1217.

**Gregory Clark**

“Human Capital, Fertility, and the Industrial Revolution,” *Journal of the European Economic Association*, 3(2-3):505-515.

**Brian C. O’Neill and Belinda S. Chen**

“Demographic Determinants of Household Energy Use in the United States,” in Wolfgang Lutz, Alexia Prskawetz, and Sanderson [eds], *Population and Environment: Methods of Analysis*, pp. 53-73.

## **Part IV: Migration, Convergence and Urbanization**

**Kevin O’Rourke, Alan M. Taylor, and Jeffrey G. Williamson**

“Factor Price Convergence in the Late Nineteenth Century,” in *International Economic Review*, Vol. 37, #3: 499-530.

**Mike Parnwell**

*Population Movements and the Third World*, pp. 4-7, pp. 12-15, pp. 84-87, pg. 119.

**Carl Mosk**

*Trade and Migration in the Modern World*, pp. 45-66.

**Charles Kenny**

“Why Are We Worried About Income? Nearly Everything that Matters is Converging,” *World Development*, 33: 1-19.

## **Part V: Age Structure and Aging**

**Richard A. Easterlin**

*Birth and Fortune: The Impact of Numbers on Personal Welfare*, pp. pp. 3-29.

**David N. Weil**

“The Economics of Population Aging,” in Mark R. Rosenzweig and Oded Stark [eds], *Handbook of Population and Family Economics*, pp. 967-992.

**Andrew Mason and Ronald Lee**

“Reform and Support Systems for the Elderly in Developing Countries: Capturing the Second Demographic Dividend,” *Genus*, LXII: 11-35.

## [IV] Course Outline

The plan for the lectures, and the readings associated with the lectures, are as follows:

### **Part I: World Population Growth and Formal Demography**

#### ***I.A Continuity and discontinuity in world population growth***

I.A.1 Basic arithmetic of population growth; exponential growth and its implications.

Readings: Livi-Bacci and Rostow in the Coursepack.

#### ***I.B Age standardization and stable population theory***

I.B.1 Problems with the crude rates

I.B.2 Age standardization: direct and indirect measures; “age structure independent” measures for fertility and mortality

Readings: In the Coursepack: Keyfitz and McInnis (pp. 280-282 only.)

I.B.3 The net reproduction rate and Lotka’s theorem

Readings: In the Coursepack: Keyfitz and Weil (pp. 969-975 only).

## **Part II: The Causes of Population Growth**

### ***II.A The Demographic Transition: classical and modern approaches***

Reading: Lee in the Coursepack.

### ***II.B The Mortality Transition***

II.B.1 The epidemiological transition and the mortality transition

II.B.2 The McKeown/Preston debate

Reading: Carey and Judge in the Coursepack.

II.B.3 The Biological Standard of Living, the Net Nutrition hypothesis, Morbidity, Health and the Crossover hypothesis

II.B.4 The Future of Mortality

Reading: Garrett and Mills & Shillcutt in the Coursepack.

### ***II.C The Fertility Transition***

II.C.1 The Fertility Transition: empirical

Reading: McInnis and Brown & Guinnane in the Coursepack.

II.C.2 The Fertility Transition: theoretical

The Caldwell, Chicago-Columbia, University of Pennsylvania (Easterlin) and Leibenstein models and their relevance for empirical analysis.

Reading: Donaldson in the Coursepack.

## **Part III: The Consequences of Population Growth**

### ***III.A The Malthusian Model: Theory and empirical relevance***

III.A.1 Theory

Reading: Malthus in the Coursepack.

III.A.2 Empirical evidence regarding the Malthusian model

III.A.3 Critiques and alternative hypotheses

Marx-Engels, Optimum Population Theory, Boserup, Simon and arguments emphasizing the advantages conferred by population growth, population density, and/or population size upon economic performance.

Reading: Alesina and Spolaore in the Coursepack.

### ***III.B From Malthus to Solow: The New Growth Theory***

III.B.1 The Swann-Solow growth model

Reading: In the Coursepack: Barro and Sala-i-Martin (pp. 16-29 only)

III.B.2 From Malthus to Solow

Reading: In the Coursepack: Mokyr, Hansen/Prescott and Clark

### ***III.C Population and the Environment***

III.C.1 The Club of Rome report and its impact

III.C.2 Contemporary policy debates

Reading: O'Neill and Chen in the Coursepack.

## **Part IV: Migration, Convergence and Urbanization**

### ***IV.A Migration: basic concepts and theory***

### ***IV.B Migration and Convergence***

IV.B.1 Migration and factor price convergence

Reading: O'Rourke, Taylor and Williamson in the Coursepack.

IV.B.2 Migration and per capita income convergence

Reading: Barro and Sala-i-Martin (pp. 285-291, 382-393), Mosk and

Kenny in the Coursepack.

**IV.C**      ***Migration and Urbanization***

IV.C.1      Mega-city growth and global city networks

IV.C.2      Third world urbanization and domestic migration: the Harris-Todaro model

Reading:      Parnwell in the Coursepack.

**Part V:    Age Structure and Aging**

**V.A**    ***Fluctuations in age structure: Echo effects, the Baby Boom and Bust, and the Easterlin hypothesis***

Reading:      Easterlin in the Coursepack.

**V.B**    ***Intergenerational transfers: the Overlapping Generations model, Social Insurance and the Second Demographic Dividend.***

Reading:      Weil and Mason & Lee in the Coursepack.

**END**