GENERAL INFORMATION

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Office: KKL 1111
Phone: 2859-8509
Consultation times: TBA

Pre-requisites

Microeconomic Analysis (ECON6021) and Macroeconomic Analysis (ECON6022), or equivalent courses.

This is one of three capstone courses for the MEcon programme. Mathematics (e.g., calculus and dynamic optimization techniques) and Statistics will be used in the course when appropriate.

COURSE DESCRIPTION

Fertility rates in industrial countries decreased substantially in the last century, with total fertility rates in many countries dropped from 6 or 7 in 1900 to less than 2 (and below the replacement level) by 2000. At the same time, life expectancy more than doubled from 30 to 40 years in 1900 to about 80 years by 2000. The speed of population changes in many East Asian societies was even more drastic. Total fertility rate in Singapore fell from 5.76 in 1960 to a strikingly low value of 1.26 in 2003. According to a recent (2016) study, the average lifespan for women in Hong Kong is 87.3 years, and the corresponding figure for men in Hong Kong is 81.2. Why do population changes of such magnitude arise, and how do they affect individual behavior of households and firms, as well as the aggregate economy?

This course examines these demographic changes, their consequences, and related policy issues. We first look at trends in world population and discuss fundamental demographic concepts of mortality, fertility, immigration and age structure. We then study economic consequences of demographic changes, including demographic dividend, saving and retirement decisions, and human capital accumulation. Finally, we examine policy issues related to demographic changes, such as retirement pension and health care reform.

The students of this course are required to choose a related project (after consulting with the instructor), and conduct an in-depth study.
COURSE OBJECTIVES

1. To provide students with important facts about population changes and their economic importance.
2. To provide an analytical framework to understand the impact of population changes on individual behavior and on the aggregate economy.
3. To prepare students to explore various possible public policy solutions.

COURSE LEARNING OUTCOMES (CLOs)

CLO1. To apply economic concepts to analyze population issues, and to develop necessary analytical skills.

CLO2. To know important facts about demographic changes and their economic importance.

CLO3. To identify local and global issues related to population changes.

CLO4. To understand the problems faced by different governments because of population changes, and the pros and cons of various policy responses.

ALIGNMENTS OF PROGRAMME AND COURSE LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Programme Learning Outcomes (PLOs)</th>
<th>Course Learning Outcomes (CLOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLO1. Understanding of fundamental theories and new development in economics</td>
<td>CLO1, CLO2, CLO3</td>
</tr>
<tr>
<td>PLO2. Mastering of skills in analyzing economic data</td>
<td>CLO1, CLO2</td>
</tr>
<tr>
<td>PLO3. Demonstration of ability to apply economic knowledge and analytical skills to address policy and business problems</td>
<td>CLO3, CLO4</td>
</tr>
<tr>
<td>PLO5. Mastering of communication skills</td>
<td>CLO4</td>
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</tbody>
</table>
## COURSE TEACHING AND LEARNING ACTIVITIES

<table>
<thead>
<tr>
<th>Course Teaching and Learning Activities</th>
<th>Expected contact hours</th>
<th>Study Load (% of study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T&amp;L1. Lectures</td>
<td>36 hours</td>
<td>30%</td>
</tr>
<tr>
<td>T&amp;L2. Exercises</td>
<td>12 hours</td>
<td>10%</td>
</tr>
<tr>
<td>T&amp;L3. Project</td>
<td>42 hours</td>
<td>35%</td>
</tr>
<tr>
<td>T&amp;L4. Self Study</td>
<td>30 hours</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120 hours</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

### Assessment Methods

<table>
<thead>
<tr>
<th>Assessment Methods</th>
<th>Weight</th>
<th>Aligned Course Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. Exercises</td>
<td>10%</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>A2. Term Test</td>
<td>20%</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>A3. Project</td>
<td>35%</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>A4. Final Exam</td>
<td>35%</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td></td>
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</tbody>
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## STANDARDS FOR ASSESSMENT

### Course Grade Descriptors

- **A+, A, A-**
  Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesize

- **B+, B, B-**
  Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesize

- **C+, C, C-**
  Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as to evaluate and synthesis

- **D+, D**
  Evidence of basic familiarity with the subject

- **F**
  Little evidence of basic familiarity with the subject
### Assessment Rubrics for Each Assessment (Please provide us the details in a separate file if the space here is not enough)

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>Assessment Rubrics for the Exercises, Term Test, and Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding</td>
<td>Each of the Exercises, Term Test and Final Exam involves mainly Short-Answer Questions.</td>
</tr>
</tbody>
</table>
| A+, A, A-         | For all or almost all of the questions, the student:  
|                   | (a) provides correct answer(s), and  
|                   | (b) analyzes in a clear and logical manner. |
| Proficient        | For most of the questions, the student:  
| B+, B, B-         | (a) provides correct answer(s), and  
|                   | (b) analyzes in a clear and logical manner. |
| Competent         | For a reasonable proportion of the questions, the student:  
| C+, C, C-         | (a) provides correct answer(s), and  
|                   | (b) analyzes in a clear and logical manner. |
| Adequate          | For a few of the questions, the student:  
| D                 | (a) provides correct answer(s), and  
|                   | (b) analyzes in a clear and logical manner. |
| Failure           | For all or almost all of the questions, the student cannot:  
| F                 | (a) provide correct answer(s), and  
|                   | (b) analyze in a clear and logical manner. |

### Performance Level | Assessment Rubrics for the Project

| Outstanding       | The student:  
| A+, A, A-         | (a) clearly identifies the main problem based on familiarity of the literature and/or real-world issues, and  
|                   | (b) provides critical analyses of the issues in a coherent framework. |
| Proficient        | The student:  
| B+, B, B-         | (a) identifies the main problem based on familiarity of the literature and/or real-world issues, and  
|                   | (b) provides critical analyses of the issues. |
| Competent         | The student:  
| C+, C, C-         | (a) demonstrates some familiarity of the literature and/or real-world issues in identifying the main problem, and  
|                   | (b) provides competent analyses of the issues. |
COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE

Course Outline

A. Introduction: World Population Trends and Fundamental Demographic Concepts

- Population Aging and its Economic Impact: Some Motivating Examples
- Trends in the World Population:
- (1) Age Structure
- (2) Individual Components: Mortality, Fertility, and Immigration
- (3) Demographic Transition
- Math. Review

B. Economic Consequences of Population Changes

- Demographic Dividend
- Labor Supply and Retirement Decisions
- Education Decisions
- Saving and Capital Accumulation

C. Related Policy Issues

- Retirement Pension
- Health Care *

* Topics may be added or subtracted as time allows.

Course Schedule

The following should be viewed as indicative only.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Week 1</td>
</tr>
<tr>
<td>Economic Consequences of</td>
<td>Weeks 2-4</td>
</tr>
<tr>
<td>Population Changes</td>
<td></td>
</tr>
<tr>
<td>Related Policy Issues</td>
<td>Weeks 4-5</td>
</tr>
<tr>
<td>Project Presentation</td>
<td>Week 6</td>
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</table>
REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS

Course webpage: Accessible through the HKU portal page (username and password required).

There is no textbook for this course. We will mainly use research papers as well as relevant chapters of various books. Detailed lists on each topic will be given in class.

COURSE POLICY

Term Test and Final Examination
There will be no make-up for the term test. If you do not attend any test, you will automatically get zero mark for the test. However, if there is a legitimate medical reason that you miss the test, you will need to inform the teacher and provide medical certificate within 72 hours of the test. In such case, the weight of the term test will be allocated to the final exam.

The final examination is cumulative. The term test and the final exam are closed book and closed notes. You will need to bring a calculator to the term test and the final exam.

Project
- Projects submitted after the due date will NOT be accepted. You will automatically get zero mark.
- Plagiarism and copying from/by other students will not be tolerated.
- More details about the project will be announced later.

Late Exercises
No exercises handed in late will be accepted.

Academic Conduct
The University Regulations on academic dishonesty will be strictly enforced! Please check the University Statement on plagiarism on the web: http://www.hku.hk/plagiarism/

Academic dishonesty is behavior in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

a. Plagiarism - The representation of someone else’s ideas as if they are one’s own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one’s own work. Paraphrasing of someone else's ideas is still using someone else’s ideas, and must be acknowledged.

b. Unauthorized Collaboration on Out-of-Class Projects - The representation of work as solely one’s own when in fact it is the result of a joint effort. Where a candidate for a degree or other award uses the work of another person or persons without due acknowledgement:
   (1) The relevant Board of Examiners may impose a penalty in relation to the seriousness of the offence;
   (2) The relevant Board of Examiners may report the candidate to the Senate, where there is prima facie evidence of an intention to deceive and where sanctions beyond those in (1) might be invoked.