The Chinese University of Hong Kong **ECON 4430 Welfare Economics** Course Outline 1<sup>st</sup> term, 2023-24

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### Teaching venues and timetable:

Tu 02:30PM - 05:15PM in YIA\_201 on 5/9, 12/9, 19/9, 26/9, 3/10, 10/10, 17/10, 24/10, 31/10, 7/11, 14/11, 21/11, and 28/11.

# Teaching mode:

- 1. 100% face-to-face teaching mode: all students should join the classes at the venues, or they will miss the lectures.
- 2. *Notice that no live lectures will be video-recorded in any situations,* including sick leave. If you have a good reason to be absent, contact the lecturer to see if some assistance may be given.
- 3. Exam/test will be also conducted in face-to-face mode.

**Course Description:** This is a self-contained course covering some advanced topics in Public Finance. Welfare economists are concerned with the theoretical foundations for economic policy-making. We intend to discuss three broad issues in this course:

- ◆ *Foundations for cost-benefit analysis.* Economists use consumer surplus to measure gain or loss from public projects, regulations, taxations or many other policies. We will discuss the foundations and problems for this type of widely adopted welfare measurement.
- ◆ *Efficiency-based economic policy analysis.* Economists emphasize that an economic system or policies undertaken in any systems should better be efficient. We discuss in detail the implications, advantages and constraints of adopting different efficiency concepts, including Pareto and Kaldor-Hicks concepts of efficiency.
- ♦ Aggregation of individual preferences. This is concerned with the formulation of "public opinion" and the theory of social choice. We discuss the idea and the mathematical proof of the Arrow's impossibility theorem that underlines, or initiates, most problems involved in the topic.

These topics are complementary to some topics discussed in Public Finance (ECON 3430). For example, consumer surplus is useful for taxation theory covered in ECON3430. Also, social choice theory completes the missing link left by the public choice theory when it criticizes voting mechanism, also a topic in ECON3430. However, we will minimize overlap, and so some topics that have been covered by Public Finance (or other applied microeconomics courses) will not be repeated or will only be briefly discussed in this course (theory of taxation, incentive mechanism, public choice theory, etc) although they are also of interest to welfare economists. As this is a self-contained course, students do not need to take ECON3430 first.

**Learning Outcomes:** After completing this course, students should be able to understand (i) why and when public policies are required to enhance the efficiency of an economy; (ii) why sometimes piecemeal policy reforms are not beneficial and a holistic perspective is needed for policy; (iii) the difficulties in formulating a collective decision on a rational basis yet individuals' opinions are respected; and (iv) the basic methods and constraints of using consumer surplus to assess the costs and benefits of policies or public projects.

**Learning Activities:** Students are generally expected to attend all the lectures. Irregular tutorials will be introduced, and the detailed arrangements will be announced in class. In my lectures, I will go through materials from the readings or notes or something more. Meanwhile, I may not cover all the materials in my lectures. Materials for examination and test will be drawn from my lectures and lecture notes.

### **Prerequisites:**

• It is necessary that you have taken ECON2011 Basic Microeconomics or its equivalent. In fact, students often find themselves not ready for Welfare Economics if they have not taken ECON3011 Intermediate Microeconomics. This is because you are expected to be very familiar with concepts like *indifference curve/budget line, isoquant/isocost line, marginal rate of substitution, expected utility*, etc.

• Calculus (in particular, constrained optimization) and mathematical proofs will be occasionally used in classroom presentations. However, students do not need to use calculus or write independent proofs in test and exam.

# Assessments:

- 1) *Test* (face-to-face mode, 40%):
- Conducted in the class of the last teaching week on **28**<sup>th</sup> **November 2023**. You must be available on the date, or you should **drop the course**.
- There will be NO makeup test. If you miss the test, you will be given a zero mark, unless you are sick **and** are able to provide the original copy, not photocopy, of a medical note issued by (i) the University Health Service (UHS) clinic; **or** a doctor registered in the Medical Council of Hong Kong with the <u>notes subsequently endorsed by UHS</u>; **and** (ii) apply for and get my approval for your leave **within five days**.
- You can't assume that the lecturer must give you the approval whenever a medical note is shown. Your case may be stronger if you ask your medical doctor to write down more clearly about your medical problem. In the approved cases, the lecturer will normally give you additional tasks and/or tests with details to be determined later (the new test, if any, may not be of the same format as the original one and the workload/time given may not be the same).
- 2) *Exam* (face-to-face mode, 60%):
- Centrally arranged by the University in the exam period (6<sup>th</sup> December 2023 22<sup>nd</sup> December 2023). **I never know the chosen date earlier than you.**
- You should follow the University regulations (including sick leave) about final examination. I have no discretionary power to change it. For absence cases approved by the University, makeup exam may be, but not necessarily, given. Alternative assessment (e.g. homework + individual project and/or alternative exam) may be adopted instead if the lecturer thinks fit.
- All exchange students are supposed to join the centrally arranged exam and are reminded that early departure is NOT a valid reason for not taking the exam and no makeup exam will be given for this reason.

# **Textbooks/references:**

Textbooks:

- Ng, Yew-Kwang (2004), Welfare Economics: Towards a More Complete Analysis, Macmillian.
- Boadway, R.W., and Bruce, N. (1984), Welfare Economics, Basil Blackwell.
- Johansson, Per-Olov (1991), An Introduction to Modern Welfare Economics, Cambridge.
- Mueller, Dennis C., Public Choice II/III, Cambridge.
- Just, R.E; Hueth, D.L; Schmitz, A. (2004), *The Welfare Economics of Public Policy: A Practical Approach to Project and Policy Evaluation*, Edward Elgar.

*Reading list*: It can be found in <u>my personal website</u>.

Leisure readings:

- Gilboa, Itzhak (2010), Rational Choice, MIT.
- Allingham, Michael (2002), Choice Theory: A Very Short Introduction, Oxford.

They are not directly relevant for the test and exam. Both books are intuitive and non-mathematical.

### **Outline of the Programme:**

1. Welfare and welfare economics

- Policy-making "in the large":
- 2. Pareto efficiency and first welfare theorem
- 3. First-best policy
- 4. Second-best policy
- 5. Ordinal utility and second welfare theorem
- 6. Welfare criteria
- 7. Arrow's impossibility theorem

Policy-making "in the small":

- 8. Marshallian consumer surplus
- 9. Equivalent and compensating variation
- *Further topics if time permits:*
- 10. Other topics in social choice theory