Lecturer: WOO, Wai Chiu (Office: ELB1003; Tel: 39438234; E-mail: wcwoo@cuhk.edu.hk)
Consultation: Please send me an e-mail for fixing the time for (Zoom) meeting.

Teaching assistant: TA office (ELB 1017) tel: 39438202.
Chen, Xuezhong (John), xuezhongchen@cuhk.edu.hk

Teaching venues and timetable:
Please refer to the CUSIS.

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 the economics of the public sector.
Welfare economists are concerned with the theoretical foundations for economic policy-making. The traditional theory of government interventions represents a core part of welfare economics, which sorts out a set of policies that promote (Pareto) efficiency of an economy based on the *Pareto principles*. Nevertheless, welfare economics is also concerned with cases where Pareto principles are not applicable or inappropriate. It also discusses concepts or principles beyond Pareto (such as the Kaldor-Hicks concepts of efficiency).
For a more comprehensive discussion of what principles should be used for policy-making, modern welfare economics also move further to incorporate the *social choice theory* in it. The theory is concerned with aggregation of individual preferences, or the formulation of "public opinion". An essential part of the theory is the Arrow's impossibility theorem. The present course will offer a lengthy, but not very technical, discussion of the proof and implications of this important theorem. These topics are complementary to some topics discussed in a sister course Public Finance (ECON 3430). For example, 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; and (iii) the difficulties in formulating a collective decision on a rational basis yet individuals' opinions are respected.

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 **26th November 2024**. 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 (4th December 2024 – 20th December 2024). **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 absentees securing approvals by the University, they will be required to (i) attend another face-to-face exam that is (likely much) longer than the original exam, (ii) finish an individual project in a short period (in one day or two days), and/or (iii) finish a homework in a short period (in one day or two days).
- Notice that absentees are not allowed to choose only one of the options (i), (ii) or (iii) above. In contrast, normally they are required to take (i)+(ii) or (i)+(iii). The choice is made by the lecturer, not the students. The rationale for having a longer exam in (i) is that we can never use the same exam paper (in the original exam) for absentees. In this case, it is hard to compare the abilities of the absentees with the students attending the original exam. Therefore, we need to collect more data from the absentees for our assessments of their abilities. This also explains why we may also require them to take (i)+(ii) or (i)+(iii), not only a single option.
- *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 (not required for test/exam):
- 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:

Core topics:
1. Welfare and welfare economics
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

Elective topics (the lecturer will announce his choice later):
8. Further topics in social choice theory
9. Consumer surplus and equivalent and compensating variation