

The Chinese University of Hong Kong  
**ECON3430B Public Finance**  
2<sup>nd</sup> term, 2024-25

**Lecturer:** WOO, Wai Chiu, [wwoo@cuhk.edu.hk](mailto:wwoo@cuhk.edu.hk), Tel: 39438234, ELB 1003.  
Consultation: Please send me an e-mail for fixing the time for (Zoom) meeting.

**Teaching assistants:** TA office (ELB 1017), tel: 39438202.

- Li, Jiaqi, [jiaqiLI@link.cuhk.edu.hk](mailto:jiaqiLI@link.cuhk.edu.hk).
- Chen, Xuezhong John, [xuezhongchen@cuhk.edu.hk](mailto:xuezhongchen@cuhk.edu.hk).

**Teaching venue and timetable:**

Please refer to the CUSIS.

**Teaching mode:**

- 100% face-to-face teaching mode: all students should join the classes at the venues, or they will miss the lectures.
- 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.
- Exam/test will be also conducted in face-to-face mode.

**Course Description:** This course is an introduction to the economic analysis of the public sector. It critically reviews the role of government in both efficiency and equity (distribution) aspects. The theory of public expenditure covers topics such as public goods, externality, etc., which are conventionally used to justify interventions. The theory of revenue (taxation) is centred upon the concept of excess burden, the minimization of it, and the trade-off between efficiency and equity goals. We use concepts in microeconomics and welfare economics to aid our analysis and students are assumed to be familiar with these concepts already (see prerequisite below).

**Prerequisite:** Students must have known very well the following economic concepts or theories: *expected utility theory, indifference curves and budget line, utility function, consumer surplus, marginal rate of substitution*, etc. In fact, students may find themselves not ready for this course if they have not taken ECON3011 Intermediate Microeconomics.

**Course Objectives:** After completing the course, students are expected to understand the rationale behind common public programs, the considerations for designing taxation policies, and potential problems in the public decision-making process.

**Learning Activities:**

- Problem sets, lecture slides/notes, and additional materials, if any, will be posted on blackboard "Course Contents". Please check it frequently.
- **Problem set or assignment answers will be given ONLY in tutorials verbally.**
- Attending lectures and tutorials is not compulsory. However, if you aim at getting a good grade, it is important that you attend all lectures, read all notes and attend all tutorials.

**Evaluations:**

*An in-class test, an individual project, OR homework (but not all of them) (30%):*

1. Students need to take a (face-to-face) test, conduct an individual project, **or** submit a series of assignments. The lecturer will decide by the middle of the semester for which scheme (test, project or assignments) is adopted. Once decided, all students should do the same thing (a test, a project, or homework). We never allow some students to do the test while others do a project or homework.
2. The details of the individual project will be announced later (by the middle of the semester). The general idea is that students should role-play as a teacher/teaching assistant/marker of Public Finance in some specific way (e.g. prepare some course materials/assignments). This is also not a group project and so each student is supposed to conduct their work independently.
3. If homework is required, 5 to 8 assignments may be given when we move along.

4. If a test is to be conducted, it will be held in the last class on **15<sup>th</sup> April 2025**. Therefore, all students must make sure that they can attend this last class. **Drop the course if you are not available.**
5. In case a test is given, the following regulations will apply: (1) 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 merely 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 medical notes endorsed subsequently by UHS; **and** (ii) apply for and get my approval for your leave **within five days**. (2) You can't assume that the lecturer must give you the approval whenever a medical note/proof 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).

*Exam (face-to-face mode, 70%):*

6. Centrally arranged by the University in the exam period (read the [University Almanac](#) for details). I never know the chosen date earlier than you.
7. 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 extra homework in a short period (in one day or two days). For (ii) or (iii), the work should involve not less than 1500 words but not more than 5000 words.
8. 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 will require them to take (i)+(ii) or (i)+(iii), not only a single option.
9. *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.*

### Readings:

*Lecture notes/slides:* They will be provided via Blackboard or other ways when we move along. Students must read these notes or slides, or they may not be able to cope with test/exam. In case a detailed lecture note is given for a topic, there will be no lecture slide given for the same topic.

### *Textbooks:*

There is not a single textbook that covers all the materials in class. I therefore recommend only some useful textbooks for your reference. The most relevant ones are listed first.

[R] Rosen, Harvey S., [Public Finance](#), McGrawHill.

[S] Stiglitz, Joseph E., *Economics of Public Sector* (3<sup>rd</sup>/4<sup>th</sup> Ed.), New York/London: W.W. Norton, 2000/2015.

[N] Ng, Yew-Kwang, *Welfare Economics: Towards a More Complete Analysis*, New York: Palgrave Macmillan, 2004. (This is also the textbook for ECON4430 Welfare Economics.)

[M] Mueller, Dennis C., *Public Choice II/III*, Cambridge: Cambridge University Press, 1989/2003.

[H] Holcombe, Randall G., *Advanced Introduction to Public Choice*, UK: Edward Elgar 2016

### *Other useful materials:*

Apart from textbooks, the lecture presentation will also be based on other books and papers. They are listed below in alphabetic order (without assuming the first ones are more important).

[1] Atkinson, A.B. (1983), *The Economics of Inequality* (2<sup>nd</sup> Ed.). Oxford Uni. Press.

[2] Baumol, W.J. & Oates, W.E. (1988), *The Theory of Environmental Policy*. Cambridge Uni. Press.

[3] Boadway, R. (2012), *From Optimal Tax Theory to Tax Policy*, MIT Press.

[4] Bruce, Neil (1998). *Public Finance and the American Economy*. Addison-Wesley.

[5] Camerer, C., Issacharoff, S., Loewenstein, G., O'donoghue, T., & Rabin, M. (2003). Regulation for conservatives: behavioral economics and the case for "asymmetric paternalism". *University of*

*Pennsylvania Law Review*, 1211-1254.

[6] HKSAR government (2005). [Broaden the Tax Base, Ensuring our Future Prosperity, What's the Best Option for Hong Kong?](#). July 2005.

[7] Hindriks, J., & Myles, G. D. (2013). *Intermediate public economics*. MIT press.

[8] Johansson, Per-Olov (1991), *An Introduction to Modern Welfare Economics*, Cambridge.

[9] Kreps, D.M. (2013), *Microeconomic Foundations I*, Princeton Uni. Press.

[10] Leach, J. (2004). *A course in public economics*. Cambridge University Press.

[11] Myles, G.D (1995). *Public Economics*. Cambridge Uni. Press.

[12] Oates, W.E. and Schwab, R.M. (2015). The Window Tax: A Case Study in Excess Burden. *Journal of Economic Perspectives*, 29(1): 163-80.

[13] Sandmo, Agnar (1999), Asymmetric information and public economics: the Mirrlees-Vickrey Nobel Prize, *Journal of Economic Perspectives*, Vol 13, Issue 1.

[14] Sen, A.K. (1997), *On Economic Inequality*, Oxford Uni. Press

[15] Slemrod, J., and Bakijia, J. (2001), *Taxing Ourselves*. MIT Press.

[16] Thaler, R.H., and Sunstein, C.R. (2003), Libertarian Paternalism, *American Economic Review*, 93(2): 175-179.

[17] Villar, A. (2017). *Lectures on Inequality, Poverty and Welfare*. Springer International Publishing.

*For a summary:* Upon completing this course, if you want to read one article for a summary of the main arguments of the whole Public Finance programme, I suggest that you read a paper by [Rosen](#), the author of the textbook above (CUHK VPN required if assess outside campus).

### Course structure:

The topics to be covered are listed below. For each topic, the more relevant reading items will be listed first, followed by less and less relevant ones. See the section of "Readings" above for identifying the full citations.

<i>Topics</i>	<i>Readings/references</i>
<b>A. What Do We Want from a Government?</b>	
1. Protection of private property	Slide#1; M, Ch2A
2. Paternalism	Slide#2; Thaler & Sunstein; Camerer et al.
3. Equity and efficiency	Note#3; R, Ch3; S, Ch3-5; N, Ch2; Kreps, 8.6.
<b>B. The Functions of a Government: Efficiency Aspect</b>	
4. Public Good	Note#4-5; R, Ch4; S, Ch7; N, Ch8
5. Clarke-Groves tax	Note#4-5; N, 8.3; M, Ch8A; Johansson, Ch8
6. Externality	Note#6-7; R, Ch5; S, Ch9; N, 7 & 10.4.2; Baumol, Ch3
7. Cap-and-trade scheme	Note#6-7; Bruce, pp. 117-123
<b>C. The Functions of a Government: Equity Aspect</b>	
8. Poverty	Note#8-9; R, Ch12; Atkinson, 10.1 & 3.4.
9. Income distribution	Note#8-9; R, Ch12; S, Ch15; N, 6.3; Slemrod, pp. 34-36.
10. Inequality index	Note#10; Sen, Ch 2 & A.2.1-2.2; Villar, Ch2,3,6.
<b>D. The Functions of a Government: Asymmetric information</b>	
11. Health insurance	Slide#11-12; R, Ch9, pp. 180-197; S, Ch12
12. Social security	Slide#11-12; R, Ch11, pp. 228-232; S, Ch14
<b>E. The Theory of Taxation</b>	
13. Taxation and behaviours	Slide#13-14; R, Ch18
14. Tax incidence	Slide#13-14; R, Ch14; S, Ch 18
15. Tax and efficiency	Note#15; R, Ch15; S, Ch19; Oates & Schwab
16. Optimal taxation	Slide#16; R, Ch16 & 21, p. 478-490; S, Ch20; Myles, Ch5; N, 6.3; Sandmo; HKSAR government; Boadway, Ch1-2.
<b>F. Public Decision-making: a Critical Assessment</b>	
17. Public choice theory	Slide#17; R, Ch6; S, Ch7; M, Ch5C; H, Ch2-4&11