

COURSE SPECIFICATION

Name of Institution Mahidol University
Campus/Faculty/Department ASEAN Institute for Health Development

Section 1 General Information

1. **Course Code and Title:** ADPM 613 Health Economics
 สอสม ๖๑๓ เศรษฐศาสตร์สุขภาพ
2. **Number of Credits:** 2 (1-2-3) (Lecture-Lab-Self-study)
3. **Curriculum and Course Type**
 Program of Study Master of Primary Health Care Management Program
 (International Program) (Electives Course)
4. **Faculty Member in Charge of this Course and Advisor of Internship**
 - 4.1 **Faculty Member in Charge of this Course**

Name Lect. Dr. Chanida Lertpitakpong
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 - 4.2 **Lecturers**
 1. Lect. Dr. Chanida Lertpitakpong
 2. Netnapis Suchonwanich, advisor of HITAP and former Deputy Secretary General of NHSO, Thailand
 3. Dr. Naiyana Praditsitthikorn, Department of Disease Control, Ministry of Public Health, Thailand .
 4. Win Techakehakij, Department of Social Medicine, Lampang Hospital, Thailand
 5. Dr. Pattara Leelahavarong, Siriraj Health Policy Unit, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
 6. Dr.Pritaporn Kingkaew, Health Intervention and Technology Assessment Program Foundation (HITAP), Thailand
5. **Semester/The training experience required in the curriculum**
 Semester 2 / Year 1
6. **Pre-requisite:** None
7. **Co-requisite:** None
8. **Venue of Study:** ASEAN Institute for Health Development
9. **Date of Latest Revision:** 20 December 2024

Section 2 Goals and Objectives

1. Course Goals

This course aims to provide knowledge and abilities as follows:

1. Describe the concept of health economics
2. Describe the use of health economics for the analysis and management in the health system
3. Apply the health economic principles to appraise the full economic evaluation

2. Objectives of Course Development/Revision Field Experience Course

Students will learn about health economics, which aims to minimize resources while maximizing people's benefits in an environment of scarcity. They will also study how the government uses the findings to efficiently allocate resources and manage the health system to reach its ultimate goals, which include improving health and protecting people from financial risk.

3. Course-level Learning Outcomes: CLOs

This course aims to provide knowledge and abilities as follows:

CLO 1 Describe the concept of health economics

CLO 2 Describe the use of health economics for the analysis and management in the health system

CLO 3 Apply the health economic principles to appraise the full economic evaluation

Section 3 Course Management

1. Course Description

An introduction to health economics; principles of the health economic evaluation; health economic evaluation methods; cost analysis; the outcome assessment; health economic evaluation results; the free market system; the government role in health economic sectors; the health insurance and the health financing; principles of economic cost and unit costs analysis; the economic evaluation of the health technology; the health equity; criteria for the health resource allocation; health economic research issues for the health system development; an application of economics for the analysis and management in the health system

2. Credit Hours per Semester

Lecture	1	Hour
Laboratory	2	Hour
Self Study	3	Hour

3. Number of hours that lecturers provide counseling and guidance to individual student

Two hours per week for counseling and guidance to individual students every Tuesday, 2-4 pm., 2nd floor ASEAN Institute for Health Development or line application based on their requirements after making an appointment in advance.

Section 4 Development of Students' Learning Outcome

Expected Outcomes on Knowledge Development	Teaching Methods	Evaluation Methods
1. Morality and Ethics <input checked="" type="radio"/> 1.1 Exhibits discipline, honesty, and punctuality <input checked="" type="radio"/> 1.2 Behave according to morals and ethics of academic and professional practice <input type="radio"/> 1.3 Avoid academic plagiarism	1) Lecture 2) Discussion 3) Exercise 4) Presentation	1) Behavioral observation for discussion 2) Presentation 3) Comprehensive examination 4) Thesis/Thematic paper
2. Knowledge <input type="radio"/> 2.1 Explain the theoretical and practical knowledge associated with primary health care management <input checked="" type="radio"/> 2.2 Explain the interconnection of various fields of knowledge in primary health care management	1) Lecture 2) Discussion 3) Exercise 4) Presentation	1) Behavioral observation for discussion 2) Presentation 3) Comprehensive examination 4) Thesis/Thematic paper
3. Intellectual Skills <input checked="" type="radio"/> 3.1 Perform the manners of continuously seeking knowledge <input type="radio"/> 3.2 Design the research to solve the problem identified in the primary health care management system <input checked="" type="radio"/> 3.3 Defend in significant ways	1) Lecture 2) Discussion 3) Exercise 4) Presentation	1) Behavioral observation for individual/group discussion 2) Presentation/Report 3) Comprehensive examination 4) Thesis/Thematic paper

Expected Outcomes on Knowledge Development	Teaching Methods	Evaluation Methods
with questions or points of view or controversies in related fields		
4. Interpersonal Relationship and Responsibility ○ 4.1 Perform interpersonal communication skills to establish and enhance personal and work-based relationships ● 4.2 Perform the role of a leader and working team member appropriately	1) Discussion 2) Exercise 3) Presentation	1) Behavioral observation for discussion
5. Mathematical Analytical Thinking, Communication Skills, and Information Technology Skills ○ 5.1 Demonstrate the statistical analysis and its interpretation ● 5.2 Communicate clearly and effectively to an array of audiences for a range of purposes ● 5.3 Use information technology effectively to support the study, research, and efforts to accomplish a specific purpose	1) Lecture 2) Discussion 3) Assignment 4) Presentation	1) Behavioral observation for individual/group discussion 2) Presentation/Report 3) Comprehensive examination 4) Thesis/Thematic paper

Section 5 Teaching and Evaluation Plans

1. Teaching Plan (Every Thursday 1-4 pm.)

Week or No.	Topic	Hours			Teaching Methods / Media	CLOs	Lecturers
		Lecture	Laboratory	Self Study			
1 (9Jan25)	Introduction to health economics	1	2	3	Powerpoint/discussion	1	Dr.Chanida

2 (16Jan25)	Economic evaluation I	1	2	3	Powerpoint/discussion	1,2	Drs. Naiyana /Chanida
3 (23Jan25)	Economic evaluation II	1	2	3	Powerpoint/discussion	1,2	Drs Naiyana/ Chanida
4 (30Jan25)	Market, demand, and supply	1	2	3	Powerpoint/discussion	1	Dr.Chanida
5 (6Feb25)	Cost of illness	1	2	3	Powerpoint/discussion	1,2	Dr.Chanida
6 (20Feb25)	Measurement of utility				Powerpoint/discussion/exercise	1	Dr.Win
7 (27Feb25)	Willingness to pay: Willingness-to-pay of households toward health promotion programs of the Thai health promotion foundation (ThaiHealth)	1	2	3	Powerpoint/discussion	1,2	Dr.Pattara
8 (6Mar25)	Disability-adjusted life years (DALYs)				Powerpoint/discussion/Exercise	1,2	Dr.Chanida
9 (13Mar25)	The developmental evaluation of “One ID card smart hospital” policy in pilot area	1	2	3	Powerpoint/discussion	1,2	Dr.Pritaporn
10 (20Mar25)	The use of economic evaluation in health benefits package selection for universal health coverage	1	2	3	Powerpoint/discussion	1, 2	Netnapis
(27Mar25)	Presentation - Present one economic evaluation paper/group - Critique the paper by using the CHEERS checklist				Powerpoint/discussion	1,3	Dr.Chanida
Total		10	20	30			

2. Evaluation Plan

Learning Outcomes	Evaluation Method				Weight (Percentage)
	Class participation	Exercise	Presentation	Report	

Learning Outcomes	Evaluation Method				Weight (Percentage)
	Class participation	Exercise	Presentation	Report	
CLO1 Describe the concept of health economics	3	20	10	5	38
CLO2 Describe the use of the health economics for the analysis and management in the health system	3	20	10	5	38
CLO3 Apply the health economic principles to appraise the full economic evaluation	4	-	10	10	24
Total	10	40	30	20	100

3. Measurement and evaluation

Course Evaluation

Classroom participation	10 %
Exercise	40 %
Group work & presentation	50 %
- Presentation	30 %
- Report	20 %

Assignment – Group presentation

- Divided into 4 groups (5-6 person/group)
- Select one economic evaluation paper to present
- Critique selected paper by using the Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS2022) checklist¹
- Present and critique the selected paper within 30 mins/group
- Provide opinions and comments to other groups
- **Submit a selected paper before presenting one week on 20 March 2025**
- **Submit a report on 31 March 2025**

¹ <https://www.equator-network.org/reporting-guidelines/cheers/>

Measurement and evaluation of student achievement

A =	85-100 %
B+ =	75– 84 %
B =	65 – 74 %
C+ =	55 – 64 %
C =	45 – 54 %
F =	0- 44 %

4. Students' Appeal

If students have any questions, problems, or want to appeal their teaching, they can meet with the course's responsible teacher, the program director, to request clarification or register a complaint for further action. If the matter is not resolved, students can file an appeal with the Academic Administration and Student Affairs Officer to request an inquiry, fact-finding, additional consideration, and problem solutions.

Section 6 Teaching Materials and Resources

1. Textbooks and Main Documents

1. Drummond MF, Sculpher MJ, Torrance WG, O'Brien BJ. Methods for the economics evaluation of health care programmes, 3rd edition, Oxford Medical Publications.
2. Revill P, Suhrcke M, Moreno-Serra R, Sculpher M, and Goddard M. Global Health Economics: Shaping Health Policy in Low- and Middle-Income Countries. Singapore: World Scientific Publishing Co. Pte. Ltd.; 2020.
3. World Health Organization (2013). Handbook on health inequality monitoring with a special focus on low-and middle-income countries, World Health Organization.
4. World Health Organisation (2014). WHO methods for life expectancy and healthy life expectancy. Global Health Estimates Technical Paper WHO/HIS/HSI/GHE/2014.5. Geneva, Department of Health Statistics and Information Systems, WHO.
5. Williams, A. H., Cookson, R. A. (2006). Equity-efficiency trade-offs in health technology assessment. International Journal of Technology Assessment in Health Care, 22(1): 1–9.

6. Woods, B., Reville, P., Sculpher, M., Claxton, K. (2016). Country-level cost-effectiveness thresholds: Initial estimates and the need for further research. *Value in Health*, 19: 929–935.
7. Ryen, L., Svensson, M. (2014). The willingness to pay for a quality-adjusted life year: A review of the empirical literature. *Health Econ*, doi:10.1002/hec.3085
8. Williams JTW, Bell KJL, Morton RL, Dieng M. Methods to Include Environmental Impacts in Health Economic Evaluations and Health Technology Assessments: A Scoping Review. *Value Health*. 2024;27(6):794-804.
9. Cohen AJ, Brauer M, Burnett R, Anderson HR, Frostad J, Estep K, et al. Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015. *Lancet*. 2017;389(10082):1907-18.
10. National Institute for Health and Care Excellence. Sustainability. National Institute for Health and Care Excellence. <https://www.nice.org.uk/about/who-we-are/sustainability>.
11. Institute for Health Metrics and Evaluation. Global Burden of Disease Study 2019 (GBD 2019) Data Resources. <https://ghdx.healthdata.org/gbd-2019>.
12. Vos, Theo et al. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*, Volume 396, Issue 10258, 1204 - 1222

Section 7 Evaluation and Improvement of Course Management

1. Strategies for Evaluation of Course Effectiveness by Students

1.1 Adhere to Mahidol University and the ASEAN Institute for Health Development requirements by conducting online assessments of students and teachers and providing ideas for improvement.

1.2 At the end of the semester, the curriculum committee will hold focus group discussions with learners.

2. Strategies for Evaluation of Teaching Methods

2.1 Student Evaluation of Teaching in the University's Online System.

2.2 Evaluation of Group Work and Reports.

2.3 At the end of each class, the instructor asks students about their grasp of the topic and allows them to ask questions via the group LINE or meet on the 2nd floor of the ASEAN Institute for Health Development.

3. Improvement of Teaching Methods

3.1 Before the start of the new semester, the responsible lecturer and instructor must meet to discuss the outcomes of student course evaluations, teaching, and assessment to improve teaching and learning management effectively.

3.2 The instructor should attend training or academic conferences on a regular basis to advance their knowledge, improve their teaching, produce media, and conduct related research.

4. Verification of Students' Learning Outcome

At the end of the semester, the course's accomplishment is evaluated by forming a committee that is not in charge of the course to analyze the teaching and learning outcomes, as well as the assessment of student learning, to ensure that they are suitable and consistent.

5. Review and Plan to Improve Course Effectiveness

Set up a yearly revision of the course to ensure that the content and/or teaching techniques are current, and to check the consistency of the assessments and recommendations.

Appendix

Relations between the course and the program

Table 1 Curriculum Mapping

● Major responsibility

○ Minor responsibility

Subjects	Morality and Ethics			Knowledge		Intellectual skills			Interpersonal relationship and Responsibility		Mathematical Analytical thinking		
	1	2	3	1	2	1	2	3	1	2	1	2	3
CLO 1 Describe the concept of health economics		○		○									
CLO 2 Describe the use of the health economics for the analysis and management in the health system		○			●		○						
CLO 3 Apply the health economic principles to appraise the full economic evaluation	●		○	○		●	●	○	○	●	●	●	●

Table 2 Relations between the course and the PLOs

	PLOs							
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
Course Code / Course name / 2 (1-2-3)	R	I	P	I	R	M	R	P

Program Learning Outcomes (TQF.2)

PLO1 Exhibit responsibility, discipline, and honesty according to organizational rules, academic and professional ethics, and morality.

PLO2 Explain the interconnection of multidisciplinary knowledge associated with primary health care management.

PLO3 Design research in primary health care management based on systematic process.

PLO4 Defend in significant ways with questions or points of view or controversies about the area of the primary health care system.

PLO5 Interact professionally when working as a team as both leader and member for solving and managing work assigned.

PLO6 Perform statistical data analysis as they support evaluating, planning, and managing the primary health care system.

PLO7 Communicate clearly and effectively to an array of audiences for a range of purposes.

PLO8 Use information technology effectively to support the study, research, and their efforts to accomplish a specific purpose.

Table 3 Relations between CLOs and PLOs

CLOs	PLOs							
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
CLO 1 Describe the concept of health economics	✓							
CLO 2 Describe the use of the health economics for the analysis and management in the health system	✓	✓	✓					
CLO 3 Apply the health economic principles to appraise the full economic	✓			✓	✓	✓	✓	✓

evaluation								
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