PHARMACOECONOMICS

Module designation	Pharmacoeconomics		
Semester(s) in which the module is taught	2		
Person responsible for the module	 Dr. apt. Yunita Nita, S.Si.,M.Pharm., (Course Coordinator) Prof. Dr. apt. Umi Athiyah, M.S. Dr. apt. Tri Murti Andayani, SpFRS. apt. Andi Hermansyah, S.Farm., M.Sc., Ph.D. 		
Language	Bahasa Indonesia		
Relation to curriculum	Compulsory / elective / specialisation		
Teaching methods	lecture, discussion, assignment		
Workload (incl. contact hours, self-study hours)	(Estimated) Total workload: Contact hours (structured activities.): 90,67 hours Private study including independent learning activites: 90,67 hours		
Credit points	2 SCU / 6 ECTS		
Required and recommended prerequisites for joining the module	NA		

Module objectives/intended	Students are:
Module objectives/intended learning outcomes	Students are: LO1: Able to realize excellence based on religious morals (excellence with morality), able to work together, and show a responsible attitude to work in their field of expertise independently LO2: Able to internalize the spirit of independence, struggle, and entrepreneurship LO4: Able to develop a pharmaceutical professional performance with analytical acumen in solving pharmaceutical problems and managing research in the pharmaceutical field related to national and global systems and policies, both inter and inter-disciplinary approaches LO5: Able to access and review information through an Information and Communication Technology (ICT) system, decide on a specific subject of study, maintain the feasibility of implementing research designs, conduct research, analyze data, conclude research results comprehensively, and create strategic issues based on the study that reflect the latest updates in the field of pharmaceutical sciences, and communicate them in the media and scientific forums at the national and international level through an interdisciplinary or multidisciplinary approach in the form of a thesis or other equivalent forms. LO6: Able to make decisions in the context of solving problems related to science and technology development based on analytical or experimental studies through collaboration with colleagues, colleagues in institutions and research communities at both national and international levels and utilizing research results for the benefit of the user and other communities LO10: Able to develop pharmaceutical management systems and policies related to the referral health care system and the role and function of pharmacists as an integral part of the health care team in order to improve community welfare LO14: Able to build drug management systems from active pharmaceutical ingredients to finished products that are ready for therapeutic uses
Content	This course will be delivered by lecture method, literature review, case discussion and presentation of critical appraisal of journals. Materials discussed include Economics, Health Economics, and Pharmacoeconomics, Cost and patient outcomes in economics evaluation, Discounting and Uncertainty, Cost Analysis, Cost Minimization Analysis (CMA), Cost Effectiveness Analysis (CEA), Cost Benefit Analysis (CBA), Cost Utility Analysis (CUA), Decision Tree and Markov Model Analysis, Budget Impact Analysis (BIA), Pharmacoeconomics and Community Practice, Pharmacoeconomics, Health Policy and Limited Resources
Exams and assessment formats	Final exam (100 minutes), take-home written assignments
Study and examination requirements	the final grade in the module is composed of 50% performance on final exams and 50% take-home assignments. Students must have a final grade of 70% or higher to pass

Reading list	1.	Bootman, Raymond, McGhan. 2005. Principles of Pharmacoeconomics. 3 rd Edition
	2.	Elliott R, Payne K. 2005. Essentials of Economic:
		Evaluation in Healthcare
	3.	Folland S, Goodman AC. 2007. The Economics of
		Health and Health Care. 5 th Ed. Pearson Education
		International (Chapter 1) Open University Press; 1 st
		Edition (2005)
	4.	Walley T, Haycox A, Boland A. 2004.
		Pharmacoeconomics. Churchill Livingstone. London.
	5.	Husereau D, Drummond M, Petrou S, et al.
		Consolidated health economic evaluation reporting
		standards (CHEERS)—Explanation and elaboration: A
		report of the ISPOR health economic evaluations
		publication guidelines good reporting practices task
		force. Value Health 2013;16:231-50.