Subject Description Form

Subject Code	FSN1D05 (ABCT1D05)
Subject Title	Chinese Medicine: Myth or Treasure?
Credit Value	3
Level	1
Pre-requisite / Co-requisite/ Exclusion	None
Objectives	The objectives of this subject are, (a) to give an overview of the principles, methods and development of Traditional Chinese medicine (TCM), and the modern application of TCM as an alternative to western medicine for medical care and health protection. (b) to introduce the scientific methods for collecting data and supporting evidence for the efficacy and safety of a drug. (c) to reflect on the different views on health, disease and therapy and their impacts on the relationships between man and nature. (d) to understand the current trends in the improvement and modernization of TCM and the role of TCM in Hong Kong.
Intended Learning Outcomes	Upon completion of the subject, students should be able to, (a) Read with greater comprehension on literature related to traditional Chinese medicine (TCM) and health care. (b) Describe the development and characteristics of TCM and the chemistry principles and techniques for assessing its efficacy and safety. (c) Apply scientific methods to find evidence and answers using TCM as a case. (d) Develop rational judgment on use of TCM and related health products. (e) Study and work more effectively in a team. Please explain how the stated learning outcomes relate to the following three essential features of GUR subjects: Literacy, Higher order thinking, and Skills for life-long learning Literacy In the preparation of presentation, students are required to search for suitable materials including some scientific papers and read through them. The presentation and written reports would be based on these materials and informations. [Outcomes (a), (b), and (d)] Higher order thinking: This subject is a broad introduction to the science and philosophy in development and use of TCM. Traditional Chinese Medicine is one of the most systematic and well-documented folk medicines in the world with a long history, though the scientific principles for its efficacy are far less well-established than western medicine. The historic developments of TCM and the public concerns with the safe use of TCM drugs can serve as good examples for the application of scientific methods in a study to retain evidence for sound conclusions. Tutorials will be carried out to help the students learn the strategies for the manufacture of TCM drugs with proven efficacy, safety and quality and for marketing the products. The students completing this subject satisfactorily should be empowered with the skills of logical thinking and rational judgment,

Life-long learning: Making rational judgment will be emphasized in teaching this subject. The students are required to keep a journal with entries stimulated by questions for the lectures. Some of the questions will be directed to reflection on whether systematic observation, scientific reasoning and rational judgment are being applied in their own decision making processes in scenarios related to their academic study, career development and personal issues. Students are divided into small groups to prepare a presentation on selected topics with individual reports. Literature survey methods will be introduced to help students collect information and assess the credibility of the document based on whether evidence is supported by experimental data. [Outcomes (c) and (e)]

Subject Synopsis/ Indicative Syllabus

- 1. Introduction to TCM terminology
 - Philosophy and terminology
 - Historic development of TCM in China: towards a systematic way of documentation
 - Methodology of TCM: diagnosis and treatment
- 2. When the East meets the West...
 - Why TCM are increasingly spread in the world?
 - TCM uses in the western countries: alternative and complementary medicine
 - Integrative (holistic) medicine
 - Efficacy, safety and quality

3. TCM Efficacy

- What do you expect from a drug?
- Drugs made by nature
- Evidence-based medicine and experimental methods
- Successful cases of TCM for cure

4. TCM Safety Concerns

- Poisoning cases with CM uses
- Toxic compounds and contaminants in CM herbs: heavy metals, pesticide residuals, microbes, toxins and western drug adultery

5. TCM in Hong Kong and China

- Economical significance
- Regulations in Hong Kong, China and other countries
- Role of Hong Kong in modernization and globalization of TCM

Teaching/Learning Methodology

<u>Lectures</u>: This is the major teaching mode to be used in this subject. Reading materials will be assigned to each lecture as a preparation; a few questions will be set for each reading material to help the students think about the context of the material.

<u>Tutorials</u>: Tutorials will be designed to help students to prepare their presentation. In the beginning of the course, suitable hands on activities will be designed, including "plant hunt" and "TCM diagnostics" to engage the students with the content. Later, students will form groups of four to six and each group will be assigned or will choose a title of their presentation. They would discuss and exchange their opinions on the selected topics. Literature survey skill will also be introduced in the tutorial.

<u>Individual Study</u>: Students are expected to spend 2-3 hours each week reading outside the classroom. Questions will be given to engage the students on the issues to be discussed. Since individual study is a weak area

	for many Hong Kong students, clear guidelines and assessments will be needed to ensure that they fulfill the reading. The emphasis of this subject on reading comprehension is to allow students to have an essential experience and training on how to study individually and effectively.									
Assessment Methods in Alignment with Intended Learning	Specific assessment methods/tasks	ent % Intended subject learning outcomes to be assessed (Please tick as appropriate)								
Outcomes			a	b	c	d	e			
	1. Quizzes	40%	V	V	√	V	-			
	2. Tutorial participation	10%	-	V	V	V	√			
	3. Presentation	20%	√	√	√	V	$\sqrt{}$			
	4. Reports & Reflective Journals	30%	V	√	V	V	√			
	Total	100 %								
Student Study	students are required to support their points with evidences as published from scientific literature. They have to judge whether the evidences are convincing to support their conclusions. The lecturers will raise questions after the oral presentation to examine their understanding and rational thinking. The presentation is a group effort which they have to cooperate in literature surveys and the final presentation. At the end a written report will be submitted by each individual student on a sub-topics of their presentation. Class contact:									
Effort Required	■ Lecture					26 Hrs.				
	■ Tutorial					13 Hrs.				
	Other student study effort:									
	Preparation for presentation					16 Hrs.				
	Self-study					42 to 72 Hrs.				
	Total student study effort					97 to 127 Hrs.				
Reading List and	Reference books:									
References	 Cooper, R, Che, C.T., Mok D.K.W., Tsang, C.W.Y. Chinese and Botanical Medicines: Traditional Uses and Modern Scientific Approaches CRC Press, 2017. 									
	2. Adams, J.D. and Lien, E.J. (Editors) Traditional Chinese M Scientific Basis for Its Use, Royal Society of Chemistry, 2013.									
	3. Scheid V: Chinese medicine in contemporary China: plurality and synthesis. Durham, N.C. Duke University Press, 2002.									
	4. McNamara S, Song XK: Traditional Chinese medicine. London, 1995.									
	5. Leung PC, Fong H, Xue C. Current review of Chinese medicine: qua									

- control of herbs and herbal materials. Hackensack, NJ, World Scientific, 2006.
- 6. Wang ZG, Chen P, Xie PP. History and development of traditional Chinese medicine. Beijing: Science Press, 1999.
- 7. Miao MS, Li ZG; Chen SQ et al. Modern practical techniques for quality control of Chinese medicine. Beijing: Ren min wei sheng chu ban she, 2000 (現代實用中藥質量控制技術 /主編: 苗明三, 李振國; 副主編: 陳隨清 et al., 北京: 人民衛生出版社).
- 8. Cutler SJ, Cutler HG: Biologically active natural products: pharmaceuticals. Boca Raton, FL: CRC Press, c2000.
- 9. Zhu, GG: Zhong yao ru he jin ru ou gong ti shi chang. Beijing: Zhongguo yi yao ke ji chu ban she, 2000 (中藥如何進入歐共體市場 / 祝國光編著, 北京: 中國醫藥科技出版社, 2000).