

Course syllabus College of Pharmacy

Course code PHA 441 Credit No. 1(1-0-2)

Course title Dietary supplements Section 01, 02

Semester 1 Academic year 2024

**Students** Pharmacy students, 4<sup>th</sup> year

## Instructors

1. Assoc.Prof.Dr. Tossaton Charoonratana

2. Assoc.Prof.Dr. Apirak Sakunpak

3. Asst.Prof.Dr. Thanapat Songsak

4. Asst.Prof.Dr. Surang Leelawat

5. Asst.Prof.Dr. Piyanuch Thongphasuk

6. Asst.Prof.Dr. Supawan Bunrathep

7. Dr. Yupin Lawanprasert

Course coordinators Assoc.Prof.Dr. Tossaton Charoonratana and

Asst.Prof.Dr. Surang Leelawat

Class hours and location Friday, 08.00 - 10.00 a.m., 4/1-503

Pre-requisite courses PHA 342 Pharmacognosy 2

PHA 354 Pharmacology for Pharmacy 2

### Course description

Laws relating to dietary supplements in Thailand and AEC, dietary supplements used in depressive, anxiety, and sleeping disorders, used for physical and mental performance enhance, cardiovascular and metabolic disorders, neurodegenerative and cognitive disorders, women and men health issues; Interactions between complementary medicines and drugs and update of complementary health products.

# Course learning outcomes (CLOs)

When completion of this course, the students should be able to:

PHA441-CLO1 Evaluate the efficacy, safety, and quality of those products using both evidence-based and ethnopharmacology studies

PHA441-CLO2 Know the necessity of specific herbal product without an extravagant consumption

PHA441-CLO3 Know the regulation of herbal and dietary supplements in Thailand and AEC

Course outlines (as shown in table below)

## Methods of Instruction

1. Lecture: PowerPoint presentation

- 2. Case-based learning
- 3. Individual and group assignment
- 4. Quiz: Pre-quiz/Post-quiz

#### Assessment

Learning evaluations include

- Paper examinations will cover all topics in Course Outlines. Weighted components of paper examination are allocated as percent content of each topic and divided into:

Final examination 95%

Quiz and assignment 5%

Note Class attendance is not less than 80% of all class sessions.

# Required texts and references

- 1. Bascom A. Incorporating herbal medicine into clinical practice. Philadelphia: Davis Company; 2002.
- 2. Baskin S., Salem H. Oxidants, antioxidants and free radicals. New York: CRC Press; 1997.
- 3. Eskin M., Tamir S. Dictionary of nutraceuticals and functional foods. New York: CRC Press; 2005.
- 4. Geoffrey PW. Dietary supplements and functional foods. Oxford: Wiley-Blackwell; 2006.
- 5. Lam YWF, Huang S, Hall SD. Herbal supplements-drug interactions. New York: Taylor & Francis Group; 2006.
- 6. Lockwood B. Nutraceuticals: A guide for healthcare professionals. 2<sup>nd</sup> Edition. London: Pharmaceutical Press; 2007.
- 7. Robert E.C. Wildman. Handbook of nutraceuticals and functional foods. 2<sup>nd</sup> Edition. New York: CRC Press; 2006.

## Special materials and data

- 1. WHO (2003) Special supplement of the Food and Nutrition Bulletin based on a WHO expert consultation on complementary feeding.
- 2. WHO (1998) Development of food based dietary guidelines for the Asian region
- 3. Association of South East Asian Nations. (2015a). Annex III ASEAN guidelines on limits of contaminants for traditional medicines and health supplements. ASEAN.

## Suggested materials and data

- 1. http://www.ncbi.nlm.nih.gov/pubmed/
- 2. https://www.nlm.nih.gov/medlineplus/
- 3. http://:www.sciencedirect.com/

## Course outline

Course code/ title PHA 441 Dietary Supplements

Credit No. 1 (1-0-2)

Semester 1

Academic year 2024

Class hours and location Fri 8.00-10.00 a.m., 4/1-503

Section 01, 02

No.	Day	Topics	Instructors
1	15 Aug 2024	Regulatory status of herbal and dietary	Dr. Yupin Lawanprasert
	(13.00-14.00 a.m.)	supplements in Thailand and AEC	
2	15 Aug 2024	An evidence-based approach to the clinical	Asst.Prof.Dr. Supawan Bunrathep
	(14.00-15.00 a.m.)	use of dietary supplements and	
		nutraceuticals	
		I. Dietary supplements used for women	
		and men health issues	
3-4	23 Aug 2024	II. Dietary supplements used for weight	Assoc.Prof.Dr. Apirak Sakunpak
		control & Physical performance	
		III. Dietary supplements used for exercise	
		and athlete performance	
5-6	30 Aug 2024	IV. Dietary supplements used for	Assoc.Prof.Dr. Tossaton Charoonratana
		cardiovascular disorders	
7-8	6 Sep 2024	V. Dietary supplements used for hair, nail,	Asst.Prof.Dr. Supawan Bunrathep
		and skin health	
9-10	13 Sep 2024	VI. Dietary supplements used for	Asst.Prof.Dr. Surang Leelawat
		enhancing cognitive function	
11-13	20 Sep 2024	VII. Dietary supplements used for	Asst.Prof.Dr. Piyanuch Thongphasuk
		depressive, anxiety, and sleeping	
		disorders	
		VIII. Dietary supplements used for eye	
		health	
14-15	27 Sep 2024	Interactions between complementary	Asst.Prof.Dr. Thanapat Songsak
		medicines and drugs	
		Final exam, 30 Sep - 11 Oct 2024	