

**Course syllabus**

College of Pharmacy

<b>Course code</b>	PHA 441	<b>Credit No.</b>	1(1-0-2)
<b>Course title</b>	Dietary supplements	<b>Section</b>	01, 02
<b>Semester</b>	1	<b>Academic year</b>	2023
<b>Students</b>	Pharmacy students, 4 <sup>th</sup> year		

**Instructors**

1. Assoc.Prof.Dr. Apirak Sakunpak
2. Asst.Prof.Dr. Thanapat Songsak
3. Asst.Prof.Dr. Surang Leelawat
4. Asst.Prof.Dr. Piyanuch Thongphasuk
5. Asst.Prof.Dr. Supawan Bunrathep
6. Asst.Prof.Dr. Tossaton Charoonratana
7. Dr. Yupin Lawanprasert

**Course coordinators** Asst.Prof.Dr. Surang Leelawat and  
Asst.Prof.Dr. Tossaton Charoonratana

**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.

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

1. Evaluate the efficacy, safety, and quality of those products using both evidence-based and ethnopharmacology studies
2. Know the necessity of specific herbal product without an extravagant consumption

**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 2023

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

Section 01, 02

No.	Day	Topics	Instructors
1	16 Aug 2023 (13.00-14.00 p.m.)	Regulatory status of herbal and dietary supplements in Thailand and AEC	Dr. Yupin Lawanprasert
2-4	16 Aug 2023 (14.00-15.00 p.m.) and 25 Aug 2023	An evidence-based approach to the clinical use of dietary supplements and nutraceuticals I. Dietary supplements used for women and men health issues II. Dietary supplements used for hair, nail, and skin health	Asst.Prof.Dr. Supawan Bunrathep
5-6	1 Sep 2023	III. Dietary supplements used for weight control & Physical performance IV. Dietary supplements used for exercise and athlete performance	Assoc.Prof.Dr. Apirak Sakunpak
7-8	8 Sep 2023	V. Dietary supplements used for cardiovascular disorders	Asst.Prof.Dr. Tossaton Charoonratana
9-10	15 Sep 2023	VI. Dietary supplements used for neurodegenerative and cognitive disorders	Asst.Prof.Dr. Surang Leelawat
11-13	22 Sep 2023	VII. Dietary supplements used for depressive, anxiety, and sleeping disorders VIII. Dietary supplements used for eye health	Asst.Prof.Dr. Piyanuch Thongphasuk
14-15	29 Sep 2023	Interactions between complementary medicines and drugs	Asst.Prof.Dr. Thanapat Songsak

Final exam, 2-13 Oct 2023