

**Course syllabus**  
**Pharmacy****College of**

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<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>
2025		
<b>Students</b>	Pharmacy students, 4 <sup>th</sup> year	

**Instructors**

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

**Course coordinators** Assoc.Prof.Dr. Tossaton Charoonratana and  
Assoc.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 of those products using both evidence-based and ethnopharmacology studies K3

PHA441-CLO2 Evaluate the safety of those products using both evidence-based and ethnopharmacology studies K3

PHA441-CLO3 Evaluate the quality of those products using both evidence-based and ethnopharmacology studies K3

PHA441-CLO4 Know the regulation of herbal and dietary supplements in Thailand and AEC K1

PHA441-CLO5 Know the necessity of specific herbal product without an extravagant consumption A2

**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** 2025

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

**Section** 01, 02

No.	Day	Topics	Instructors
1	14 Aug 2025 (13.00-14.00a.m.)	Regulatory status of herbal and dietary supplements in Thailand and AEC	Dr. Yupin Lawanprasert
2	14 Aug 2025 (14.00-15.00a.m.)	An evidence-based approach to the clinical use of dietary supplements and nutraceuticals  I. Dietary supplements used for women and men health issues	Asst.Prof.Dr. Supawan Bunrathep
3-4	22 Aug 2025	II. Dietary supplements used for hair, nail, and skin health	Asst.Prof.Dr. Supawan Bunrathep
5-6	29 Aug 2025	III. Dietary supplements used for cardiovascular disorders	Assoc.Prof.Dr. Tossaton Charoonratana
7-8	5 Sep 2025	IV. Dietary supplements used for weight control & Physical performance  V. Dietary supplements used for exercise and athlete performance	Assoc.Prof.Dr. Apirak Sakunpak
9-10	12 Sep 2025	VI. Dietary supplements used for enhancing cognitive function	Assoc.Prof.Dr. Surang Leelawat
11-13	19 Sep 2025	VII. Dietary supplements used for depressive, anxiety, and sleeping disorders  VIII. Dietary supplements used for eye health	Asst.Prof.Dr. Piyanuch Thongphasuk
14-15	26 Sep 2025	Interactions between complementary medicines and drugs	Asst.Prof.Dr. Thanapat Songsak
Final exam, 30 Sep - 10 Oct 2025			