

**Therapeutics of Herbal & Other Natural Medicinals**  
**Phar 5270**  
**Fall 2020 Course Syllabus and Schedule**  
Online and Zoom  
Wednesdays 3:35-5:30pm

**COURSE DIRECTOR:**

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**COURSE OBJECTIVES**

Upon completion of this course, the student should be able to:

1. Demonstrate an understanding of what resources are available to find accurate, reliable, authoritative information on the therapeutic constituents of herbs and other natural medicinals.
2. Know the appropriate clinical indications, uses, dosages, interactions, side effects and pharmacology of selected natural products covered in this course.
3. Know the regulatory and labeling issues as well as how they apply to natural products and other dietary supplements.
4. Demonstrate an understanding of the integrative complementary health care models that coexist with natural medicinals.

## GENERAL COURSE INFORMATION

This course adheres to the items listed in the College of Pharmacy Central Syllabus:  
[https://docs.google.com/a/umn.edu/document/d/1artQ5e1rbzxe8lEtWo7BE8k8snZAEgMMz\\_QcW8yJ-II/edit?pli=1](https://docs.google.com/a/umn.edu/document/d/1artQ5e1rbzxe8lEtWo7BE8k8snZAEgMMz_QcW8yJ-II/edit?pli=1)

### PREREQUISITES:

Organic chemistry and pathophysiology of disease states

### Course Materials and Content Format including Bi-Weekly Quizzes, Mid-Term, Final, and Extra Credit:

The course is offered On-line with instructors pre-recording lectures that will be released during pre-assigned weeks. Each week a therapeutic class or subject matter content will be provided. Some lectures may be conducted live with ZOOM during the scheduled class time (Wednesday 3:35 – 5:30) to ensure students have an opportunity to attend live and ask questions if desired (see schedule). Those lectures will also be posted for students that do not attend the live ZOOM presentations.

Students are responsible to watch the on-line content which will be included in biweekly quizzes that will be administered on-line. Students will be allocated 15 minutes to complete the open book biweekly quizzes. There will also be a Midterm and Final exam which will also be administered on-line with one hour allocated for completion.

Students will be offered the opportunity to complete a brief 5-10 minute recorded presentation (PPT/ZOOM) or 3-4 page term paper for extra credit special project. Students must sign up for extra-credit by October 21st. Presentations or Term Papers will be assigned to one of the two student presentation class periods on a first come first serve basis with the November 25<sup>th</sup> class period assigned first. The course director will choose presentations and/or term papers from those that submit to be released to the entire class during designated weeks. Content from selected student presentations will be included in exams. PowerPoint/ZOOM presentations should be recorded so they can be posted if selected.

Exams and grading will count as follows:

Bi-Weekly quizzes (4)	50%
Midterm	25%
Final	25% (non-cumulative material after midterm)
Extra Credit Special Project	(Additional 10 points added to final point score)

### GRADING POLICY:

A	100 %
A-	< 93.0 %
B+	< 90.0 %
B	< 87.0 %
B-	< 83.0 %
C+	< 80.0 %
C	< 77.0 %
C-	< 73.0 %
D	< 70.0 %
F	< 60.0 %

## **COURSE EVALUATION:**

Scheduled at the end of the final exam and handed in with the final.

## **RECOMMENDED READINGS**

Students are responsible for all material presented in class as well as required readings assigned by the instructors.

The following are references in herbal medicine which are excellent resources for the student as additional recommended readings:

### **Suggested Books:**

Tracy, T. Kingston, RL.: Herbal Products – Toxicology and Clinical Pharmacology: Second Edition. Humana Press 2007

[Blumenthal, The ABC Clinical Guide to Herbs](#): From the American Botanical Council 2003 | ISBN 1588901572/3131323914 | Thieme Medical Publishers: [www.thieme.com](http://www.thieme.com)

Tyler, Varro. The Honest Herbal and Herbs of Choice. Pharmaceutical Press.

Stansbury, Jill. Herbs for Health & Healing. Publications International Ltd. (1997).

Weiss, R.F. Herbal Medicine. Beaconsfield Publishers (1988).

Newall, C. and L. Anderson and J. Phillipson. Herbal Medicines: A Guide for Health-Care Professionals. University of London Press (1996).

The American Botanical Council's Complete German Commission E Monographs-Therapeutic Guide to Herbal Medicines. 1998 Thieme Medical Publishers

Cardiometabolic Risk Management: A Functional and Lifestyle Approach: Principals and Protocols for Healthcare Professionals. 2018  
Thomas G. Guilliams PhD  
Point Institute ([www.pointinstitute.org](http://www.pointinstitute.org))

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**Fall 2020 Course Schedule**  
**All lecture Online and some Online & ZOOM Live (Wednesday's 3:35-5:30pm)**

<b>Date</b>	<b>Topic</b>	<b>Lecturer</b>	<b>Online/Live</b>
September 9th, 2020	<b>Nutraceuticals, Dietary Supplements and Other Natural Medicinals: What are they and how are they regulated.</b> <b>Overview of Course</b>	Rick Kingston PharmD	ZOOM Live & Online
September 16th, 2020	<b>Complementary Medicine</b> <b>Integrative Medicine</b> <b>Functional Medicine</b>	Karen Lawson MD	ZOOM Live & Online
September 23rd, 2020	<b>Quiz 1</b> <b>Pharmacognosy and Natural Products:</b> <b>Bridging the Gap with Traditional Medicinals</b>	Michael Balick PhD	ZOOM Live & Online
September 30th, 2020	<b>Product Category: CNS</b>	Mark Blumenthal/Rick Kingston PharmD	ZOOM/Online
October 7th, 2020	<b>Quiz 2</b> <b>Product Category: Medicinal Cannabis</b>	Kyle Kingsley MD Ann Philbrick PharmD	ZOOM/Online
October 14th, 2020	<b>Toxicity of Nutraceuticals and Postmarket Surveillance of Dietary Supplements</b>	Rick Kingston PharmD	ZOOM/Online
October 21, 2020	<b>Natural Product Pharmacokinetics &amp; Military use of Natural Medicinals in US History</b>	Bill Gurley PhD	ZOOM/Online
October 28th, 2020	<b>MIDTERM (One Hour)</b> <b>Herbals and Drugs: Kava and Chemo Protection (2nd Hour)</b>	Chengguo Xing PhD	ZOOM/Online
November 4th, 2020	<b>Nutritional and Supplement Approaches to Diabetes</b>	Thomas G. Guilliams, PhD	ZOOM/Online
November 11th, 2020	<b>Quiz 3</b> <b>Student Presentations</b>	Rick Kingston PharmD	ZOOM/Online
November 18th, 2020	<b>Therapeutics Benefits of Wine</b>	Leo Sioris PharmD	ZOOM/Online
November 25th, 2020	<b>Quiz 4</b> <b>Student Presentations (Paper or PPT)</b>	Rick Kingston PharmD	ZOOM/Online
December 2nd, 2020	<b>Product Category: Cancer prevention/ Immune support/Anti-inflammatory and Inflammatory Mediators</b>	Ben Baechler MD	ZOOM/Online
December 7th, 2020	<b>Final Exam</b>	Rick Kingston PharmD	ZOOM/Online
December 14th, 2020	<b>OPEN</b>		