Instructor: Dawn M. Upchurch, Ph.D., L.Ac.
Professor
21-236B
upchurch@ucla.edu

Class Times: Tuesdays
9:00 am – 11:50 am
41-235

Office Hours: Tuesdays 12:00 pm – 2:00 pm
(by appointment, please sign up outside my office)

Objectives of the Course:

The purpose of this course is to provide interested public health and allied health services students with an overview of complementary and alternative medicine (CAM) in the US. The course will cover prevalence and patterns of use, evidence-based research and CAM, some common CAM modalities, and emerging research and programs relevant to CAM. The course serves as one of the departmental elective courses required for the MPH degree in the Department of Community Health Sciences.

Specific objectives are:

<table>
<thead>
<tr>
<th>Objective</th>
<th>ASPH Core Competency designations</th>
<th>CHS Core Competency designations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To develop a working definition of CAM and to have a basic understanding of the prevalence and patterns of CAM use in the US. To be able to identify differences based on sociodemographic and psychosocial characteristics.</td>
<td>C-1, C-6, C-7</td>
<td>2, 3</td>
</tr>
<tr>
<td>2. To achieve a general appreciation of evidence-based research and evidence-based medicine, especially as it pertains to CAM effectiveness and efficacy. Also, to be able to identify specific side effects and adverse effects of some important CAM modalities</td>
<td>A-9, C-9, C-10, E-8, I-7, I-9</td>
<td>5,7</td>
</tr>
<tr>
<td>3. To obtain an overview of common theoretical and conceptual models that have been applied to better explain and understand CAM use.</td>
<td>A-9, D-4, E-1, E-7</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td>4. To acquire an understanding of the paradigms, scope of practice, and specific techniques for a set of illustrative CAM modalities that can be categorized according to their etiology and proposed mechanisms of action.</td>
<td>D-4, E-7, I-2, I-7</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td>5. To obtain evaluation skills with respect to measuring and assessing CAM effectiveness and efficacy. To develop an appreciation of new study designs that may be more appropriate for assessing CAM’s utility.</td>
<td>A-4, A-8, A-9, C-10, E-8, G-6, G-7</td>
<td>5, 7, 8</td>
</tr>
<tr>
<td>6. To develop the critical skills necessary to become an informed consumer of CAM and an informed public health professional. To have a basic understanding of the ways in which CAM is being integrated with conventional medicine (or not).</td>
<td>D-1, D-2, D-4, E-4</td>
<td>5, 7, 8</td>
</tr>
</tbody>
</table>
Course Requirements:

**Evaluation:** Student evaluation is based on the following requirements.

1. **30% of Total Grade: Class participation and weekly write-up of readings.** Students are required to prepare a short (1 page or less) summary of one key topic covered in the readings and one question to bring to class for possible discussion. (This is not required for the first week.) Attendance is expected at all class sessions and students are expected to participate in discussion and ask questions. Please complete all of your readings prior to class. Each class will include a structured, lecture didactic portion and a more seminar-style oriented portion. The more you participate, the more you will get out of the class!

2. **60% of Total Grade: Final Project.** The final project is an independent research paper on any CAM health topic that is of interest. There are two options. For the first option, the topic can focus on research of a specific CAM modality (e.g., acupuncture) or a health condition for which CAM modalities have been found to be useful (e.g., arthritis). The work for this project must incorporate a critical examination and evaluation of the scientific literature on the relevant topic. You are encouraged to draw from meta-analysis from the Cochrane reviews for highest level of scientific evidence. Importantly, the paper should also provide rationale for public health importance and consider possible programmatic implications. For the second option, you may select a CAM modality that interests you and that you have never tried before, and try it! The final paper should include a “case study” of your experiences, along with a scientific literature review. The final paper should be 12-15 pages of text, double spaced, and should include references, data tables, or any other pertinent information. The format of references in the paper should follow APA or biomedical (e.g., AJPH) criteria. Additional information will be provided in class. The paper is due on the Friday of the last week of classes (see schedule).

3. **10% of Total Grade: 5 Minute Presentation.** Students are required to also present a very brief (10-12 minutes) summary of a structured abstract on Final Project paper. This abstract is to have the following subheadings: 1) Objectives 2) Design 3) Outcome Measures 4) Results 5) Conclusions. The structured abstract is to be presented and handed in during the final session (week 10). The abstract should not exceed 300 words.

Classroom Expectations:
- Please arrive to class on time.
- Remember to turn your cell phone off before entering the classroom.
- No texting during class, please.
- Be professional and committed to learning.
- If you use your laptop or tablet during class, use it only to access the articles, PowerPoint presentation slides, or to take notes. Don’t waste classroom time by reading email and FB, browsing webpages, etc. *I can tell if you are using your computer for other activities.* So please, you’re here to learn the material, so be good to yourself and focus on what is being presented and discussed.

Required Readings:

Readings listed for each class session. All materials, including syllabus and lectures, can be found on the course website:

https://ccle.ucla.edu/course/view/16W-COMHLT276-1

Literature Search Resources

UCLA Darling Biomedical Library, Searching Journal Databases:
http://www2.library.ucla.edu/pdf/dissecting_database.pdf
Citation Software Management: http://www.library.ucla.edu/libraries/biomed/8012.cfm

Academic Integrity
You are expected to act with integrity, responsibility and professionalism in all aspects of your course-related work. Please read and follow the principles described in:
http://www.studentgroups.ucla.edu/dos/assets/documents/StudentGuide.pdf
http://www.studentgroups.ucla.edu/dos/students/integrity/
Also see UCLA Office of Dean of Students: http://www.deanofstudents.ucla.edu/integrity.html

Students with Disabilities
If you need or want to request an accommodation due to a suspected or documented disability, please inform me and contact the Office of Students with Disabilities as soon as possible at A255 Murphy Hall (310-825-1501 or 310-206-6083 (telephone device for the deaf)). Website: www.osd.ucla.edu. This information is treated as confidential.

Help with (Re)Adjusting to Graduate School or Other Issues
Graduate school can be a time of substantial change and stress. For many people, adjusting to changes or to graduate school itself can be stressful. If you find yourself experiencing stress or excess worry the UCLA Counseling and Psychological Services: http://www.counseling.ucla.edu/ is available. It is completely confidential and free to students.

Other recommended Links
UCLA Graduate Division Student Life Website: http://www.grad.ucla.edu/asis/infoserv/index.html
UCLA Graduate Division Diversity Website: http://www.grad.ucla.edu/asis/diversity/index.html

Other Useful Information and Websites:

National Library of Medicine, Medline Plus Health Information
http://medlineplus.gov/

Food and Drug Administration
http://www.fda.gov/

Office of Dietary Supplements, National Institutes of Health
http://ods.od.nih.gov/

CAM on PubMed

National Center of Complementary and Integrative Health (NCCIH), National Institute of Health
http://www.nccih.nih.gov/

The Cochrane Database of Systematic Reviews is a collection of evidence-based reviews produced by the Cochrane Library, an international nonprofit organization.
http://www.thecochranelibrary.com/view/0/index.html

University of Maryland Center for Integrated Medicine
http://www.compmed.umm.edu/default.asp
## COURSE SCHEDULE:

<table>
<thead>
<tr>
<th>Class Session</th>
<th>Date</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/5</td>
<td>What is CAM? Prevalence and Patterns of Use in the US</td>
</tr>
<tr>
<td>2</td>
<td>1/12</td>
<td>CAM “Core Values” &amp; Does CAM “Work”?</td>
</tr>
<tr>
<td>3</td>
<td>1/19</td>
<td>Stressors, Stress, Health, Disease &amp; CAM</td>
</tr>
<tr>
<td>4</td>
<td>1/26</td>
<td>Whole Systems Medicine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Traditional Chinese Medicine, Ayurveda, Naturopathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Homeopathy</td>
</tr>
<tr>
<td>5</td>
<td>2/2</td>
<td>Manipulative and Body-Based Modalities &amp; Medicinal Garden Fieldtrip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chiropractic, Massage</td>
</tr>
<tr>
<td>6</td>
<td>2/9</td>
<td>Mind-Body Based Modalities:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meditation, Yoga, Tai Chi/Qi Gong</td>
</tr>
<tr>
<td>7</td>
<td>2/16</td>
<td>Botanicals and Nutritional Supplements</td>
</tr>
<tr>
<td>8</td>
<td>2/23</td>
<td>Fasting, Detoxes, Diets and Food as Medicine</td>
</tr>
<tr>
<td>9</td>
<td>3/1</td>
<td>Measuring CAM Effectiveness &amp; Integrative Medicine</td>
</tr>
<tr>
<td>10</td>
<td>3/8</td>
<td>Student Presentations</td>
</tr>
</tbody>
</table>

**FINAL PAPERS DUE:**

Friday March 11th by 5:00 pm
Session 1. What is CAM? Prevalence and Patterns of Use in the US


Read appropriate materials on NCCIH website: https://nccih.nih.gov/

What are CHA?
https://nccih.nih.gov/health/integrative-health

Topics A-Z
https://nccih.nih.gov/health/atoz.htm

Session 2. CAM “Core Values” and Does CAM “Work”?


Session 3. Stressors, Stress, Health, Disease and CAM

Key topics and concepts will be covered in my lecture notes. Much of the stress literature is very biomedical, therefore I am recommended a few websites for you to read and review.

Harvard Medical School – Overview of the stress response
http://www.health.harvard.edu/staying-healthy/understanding-the-stress-response

NIH Fact Sheet on Stress

Medline Review on Stress
Review links of interest

Web MD Stress Overview
Session 4. Traditional Chinese Medicine, Ayurveda, Naturopathy, and Homeopathy

NOTE: In class I will be covering primarily Traditional Chinese Medicine (TCM), in part because of my expertise as a TCM practitioner. Also, the other modalities are not commonly practiced in the US. AND TCM and Ayurveda have similarities (which I’ll mention in class).

NCCIH Website – Overview of Traditional Chinese Medicine
https://nccih.nih.gov/health/whatiscam/chinesemed.htm

NCCIH Website – Overview of Ayurveda

NCCIH Website – Overview of Naturopathy/Homeopathy
https://nccih.nih.gov/health/homeopathy


Session 5. Manipulative and Body-Based Modalities & Medicinal Garden Fieldtrip

NCCIH Website – Overview of Chiropractic

NCCIH Chiropractic Spinal Manipulation
https://nccih.nih.gov/health/pain/spinemanipulation.htm

NCCIH Website – Massage Therapy
https://nccih.nih.gov/health/massage/massageintroduction.htm


Session 6. Mind-Body Based Modalities: Meditation, Yoga, Tai Chi/Qi Gong

NCCIH Website – Meditation
https://nccih.nih.gov/health/meditation/overview.htm

NCCIH Website – Yoga
https://nccih.nih.gov/health/yoga/introduction.htm

Watch Video: https://nccih.nih.gov/video/yoga

NCCIH Website – Tai Chi & Qi Gong


Session 7. Botanicals and Nutritional Supplements

NOTE: There are simply too many botanicals and herbal supplements to individually cover each of them. The following web pages provide good overviews and information on how dietary supplements are regulated in the US. My Power Point lecture notes (posted on the course website) will provide more detail on specific botanicals and nutritional supplements, especially pertaining to active ingredients, safety, and as they are used in different CAM paradigms. Please review those lecture notes prior to class for additional detail.

NCCIH “Herbs at a Glance”
https://nccih.nih.gov/health/herbsataglance.htm

NCCIH Herb-Drug Interactions
https://nccih.nih.gov/health/herbs/understanding-interactions

NCCIH Website – Dietary Supplements

Read FDA website on Dietary Supplements
http://www.fda.gov/AboutFDA/Transparency/Basics/ucm193949.htm

Watch FDA webinar on Dietary Supplements
http://www.fda.gov/AboutFDA/Transparency/Basics/ucm195691.htm

Read NIH Office of Dietary Supplements
http://ods.od.nih.gov/factsheets/DietarySupplements-HealthProfessional/
Skim the 1994 Dietary Supplement Health and Education Act

Session 8. Fasting, Detoxes, Diets and Food As Medicine

Key topics and concepts will be covered in my lecture notes.

NCCIH Diets for Weight Loss – CAM
https://nccih.nih.gov/health/weightloss

NIH Office of Dietary Supplements – Weight loss

NCCIH Research Highlights
https://nccih.nih.gov/research/results/spotlight/030607.htm

Also read article:

More recent meta-analysis on diets for weight loss:

Intermittent Fasting for Longevity
http://thefastdiet.co.uk/

Watch Dr. Michael Mosley’s documentary:
http://www.dailymotion.com/video/x18a1b6_michael-mosley-eat-fast-live-longer_lifestyle

Read Dr. Longo’s (USC) press release:
https://news.usc.edu/82959/diet-that-mimics-fasting-appears-to-slow-aging/
NOTE: this study was done in yeast and rats!

Session 9. Measuring CAM Effectiveness & Integrative and Functional Medicine

Web MD What is Integrative Medicine
http://www.webmd.com/a-to-z-guides/features/alternative-medicine-integrative-medicine

Visit these websites:
http://www.osher.ucsf.edu/about-us/what-is-integrative-medicine/
http://integrativemedicine.arizona.edu/

Session 10. Student Presentations