

# **IB 117 MEDICAL ETHNOBOTANY**

## **IB 117L MEDICAL ETHNOBOTANY LAB**

**U. C., Berkeley, Department of Integrative Biology**

**Professor, Thomas Carlson, M.D., M.S. [tcarlson@berkeley.edu](mailto:tcarlson@berkeley.edu)**

**Office Hours 8–9 PM Thursday evening in VLSB 1001 (entrance to herbarium across from T. rex)**

**GSI: Christopher Hobbs**

**GSI: Joshua Povich**

**Lecture IB 117 (2 credits)**

**Lab IB 117L (2 credits) 1<sup>st</sup> lab is Tuesday, September 12th**

**(Readers available: Krishna Copy Center, 2111 University Ave. Phone: 540-5959)**

Students may take the lecture course (IB 117) alone for two credits, the lab course (IB 117L) course alone for two credits, or both the lecture and the lab for a total of four credits.

**No course prerequisites are required for either the lecture or the lab.**

### **IB 117 MEDICAL ETHNOBOTANY LECTURE COURSE**

Biological diversity and ethnolinguistic diversity sustain traditional botanical medicine systems of the world. Major topics covered in this course include: ethnolinguistic origins of medicinal plant knowledge on plant-derived pharmaceuticals and phytomedicines; field research methods in ethnobotany and ethnopharmacology; examples of how traditional botanical medicines provide safe, effective, affordable, and sustainable primary health care to tropical countries; human physiology, human diseases, and mechanisms of action of plant-derived drugs. There will be one 120 minute lecture a week in 2050 Valley Life Sciences Building. There will be a one hour written midterm exam and a ninety written final examination.

### **IB 117L MEDICAL ETHNOBOTANY LAB**

The laboratory portion of the course (IB 117L) will be for 2 credits. There will be a total of six hours of lab per week with a three hour lab (2:00 – 5:00 PM) in the Valley Life Sciences Building and on a three hour lab in the UC Botanical Gardens. These labs will focus on studying medicinal plants from the major ecosystems and geographical regions of the world. Students will learn common names, scientific names, plant families, field identification, habitats, and ethnomedical uses of medicinal plants. How the medicinal plant is prepared, administered, and used as a phytomedicine will also be discussed. There will be reference to the phylogenetic relationships between the plant families and genera represented by the medicinal plants. The course will have a laboratory room in the 3030 Valley Life Sciences Building where fresh botanical specimens and dried botanical voucher specimens of the medicinal plant species will be displayed for students to study throughout each week. The first lab is Tuesday, September 12<sup>th</sup>.

## **IB 117 Lecture Syllabus**

**Office Hours for Professor Carlson ([tcarlson@berkeley.edu](mailto:tcarlson@berkeley.edu))  
8 – 9 PM Thursday evening in VLSB 1001 (entrance to herbarium across from T. rex)**

**IB 117 Lecture Reader** available: Krishna Copy Center, 2111 University Ave. Phone: 540-5959.  
Required pages corresponding to each lecture will be in reader

### **Lecture Schedule on Thursdays 6 - 8:00 PM VLSB 2050**

Week # 1: 8/31/04: Overview of Medical Ethnobotany

Weeks #2 & #3: 9/7/04 & 9/14/04: Autonomic Nervous System/Skeletal Muscle System & Phytomedicines

Weeks #4 & #5: 9/21/04 & 9/28/04: Human CNS System, Hallucinogens, Pain, & Phytomedicines

Week #6: 10/05/04: Endocrine System & Phytomedicines

Week #7: 10/12/04: Midterm Written Examination (45% of grade)

Week #8: 10/19/04: Type 2 Diabetes mellitus & Phytomedicines

Weeks #9 & #10: 10/26/04, 11/02/04: Cardiovascular System & Phytomedicines

Weeks #11: 11/09/04: Cancer, Immune System & Phytomedicines

Week #12: 11/16/04: Infectious Diseases, & Phytomedicines

Week #13: 11/23/04: Thanksgiving/NO LECTURE

Week #14: 11/30/04: Human Gastrointestinal System & Phytomedicines

Week #15: 12/07/04:  
Respiratory Systems & Phytomedicines  
Dietary Beta Carotene & Tropical Public Health

Lecture Final Exam: Final Exam Week (55% of grade)