

## University of Central Florida

Biology Department

### MEDICINAL BOTANY

**BOT4850**

**LECTURE SYLLABUS**

**Fall 2013**

**Instructor:** Dr. Rani Vajravelu

Ph: 407 823 0990

Office: Bio 201D

**Lecture:** Tue&Thur: 12:00–1:20PM

**Place:** ENG 2-102

**Credits:** 3

**Office Hours:**

Face to Face

No appointments necessary

{ M, W, F: 10:00 AM – 11:00 AM

{ R: 1:30 PM – 2:30 PM

*If the above hours are not convenient to you, please make an appointment through email.*

**OFFICE:**

Biology 201D

**Course homepage:**

Access BOT4850 within Webcourses@UCF

(More course policies on homepage with \* are to be considered as extension of this syllabus)

**E-mail:** For course-related questions, use email (Inbox) link through Webcourses- BOT 4850.

For other purposes: [Rani.Vajravelu@ucf.edu](mailto:Rani.Vajravelu@ucf.edu) (there is no guarantee for a reply with this address).

**PREREQUISITES:** PCB 3023 Molecular Cell Biology

**Course Description:** The medicinal properties of plants and their role in both traditional and modern medicine; history of herbal medicine, and alternative medicinal practices around the world.

**Suitable for:** Students pursuing a pre-professional degree in health-related disciplines from all colleges. Restricted elective for Biology majors.

**Note:** Please expect a tedious workload and a vast amount of technical information that will require organizational skills & committed study habits. Knowledge on Angiosperm plant structure is essential.

**Objectives:**

- to gain knowledge on the value and diversity of best known medicinal plants of the world.
- to find out the role of phytochemicals in herbal medicine.
- to get an overview of alternative medicine systems employed around the world.
- to learn about the historical and modern uses of plants in medicine.

**Required:**

1. Textbook 1: **Medicinal Plants of the World** Ben-Erik van Wyk & M. Wink 2009, TimberPress ISBN 13: 978 0 88192 602 6
2. eInstruction Response pad (clickers- Gen 3 PULSE) for CPS use in the classroom.
3. Access to course homepage, web links and all posted relevant materials.

**Recommended:**

1. **Medical Botany** *Plants affecting Human Health*, 2<sup>nd</sup> ed. Lewis & Elvin-Lewis, 2003. John Wiley & Sons, Inc. ISBN 0 471 62882 4
2. **Nature's Medicine** *Plants that Heal*, Joel L. Swerdlow, 2000. National Geographic Society. ISBN 0 7922 7586

**Late Registration:** August 19 - 23; **DROP / SWAP:** August 22; **Withdrawal Deadline:** Oct 28

University Holidays: Sep 02, Nov 11, & 28 - 30

**Attendance:**

Students are responsible for all material presented in class, including announcements about course procedures, quizzes and exams. Quizzes and exams often include questions on material presented in class, so performance on these indirectly reflects attendance. Students are NOT expected to provide an excuse for their absence unless a test is missed.

Please note:

This course serves as an introduction to medicinal uses of plants and not designed to teach anyone to self-diagnose and treat health-related conditions. Information learned from this course is not meant to substitute medical advice and supervision from trained physicians.

Lecture schedule [tentative] & Test dates:

Selected topics from the text book and posted articles will be covered in the form of lectures, reading assignment, projects, and guest presentations. Reading assignments will be posted on course homepage and announcements will be made accordingly.

Date	Topic <i>Please note that the chapter numbers below are used for meaningful organization of the instructor's material. They may not correspond with the chapters given in the required textbook.</i>
Aug 20 & 22	Syllabus distribution; course policies explained. Ch. 1 Introduction to the Medicinal Plants
Aug 27 & 29	Ch. 2 Overview of plant parts/products used in herbal medicine Ch. 3 Risk-Benefit profiles of herbal therapies
Sep 03 & 05	Ch. 4 Phytochemicals and their actions
Sep 10 & 12	Ch. 4 Phytochemicals and their actions Ch. 5 Alternative Medicine Systems of the World African & Middle Eastern; American- North, Central & South
Sep 17 & 19	Ch. 5 Alternative Medicine Systems- contd. Australian & Southeast Asian; Ayurvedic , Chinese, European Other- Aromatherapy, Homeopathy
Sep 24 & 26	<b>Sep 24-</b> Test 1 on previous material Ch. 6 Therapeutic uses of plants in human health conditions: part 1
Oct 01 & 03	Ch. 6 Therapeutic uses of plants in human health conditions: part 1
Oct 08 & 10	Ch. 6 Therapeutic uses of plants in human health conditions: part 1
Oct 15 & 17	Ch. 6 Therapeutic uses of plants in human health conditions: part 2
Oct 22 & 24	<b>Oct 22</b> - Test 2 on material covered since Test 1 Ch. 6 Therapeutic uses of plants in human health conditions: part 2
Oct 29 & 31	Ch. 6 Therapeutic uses of plants in human health conditions: part 2
Nov 05 & 07	Ch. 7 Plants currently used in modern medicine
Nov 12 & 14	Ch. 7 Plants currently used in modern medicine
Nov 19 & 21	Ch. 8 GRAS Medicinal Plants <b>Nov. 21</b> - Test 3 on material covered since Test 2
Nov 26	Review for final exam
Dec 05 at 10 AM	Final comprehensive exam. 10 AM – 12: 50 PM

Evaluation: Total points for the course: 500  
 TESTS: 3 tests, each worth 100 points: 300 points [60%].  
 FINAL: Comprehensive examination: 200 points [40%].  
 BONUS: Surprise clicker quizzes & class participation: 10 points [2%]

Opportunities to earn bonus points will be given throughout the semester. Students are advised to stay prepared at all times. No makeup will be given for missed bonus activity.

Total bonus points will be added to overall total [from 3 tests & final] at the end of the semester.

Tests and final exam will include questions based on material covered in lectures, reading assignments, guest presentations and videos.

Evaluation Policy for the entire course:

All of the points earned from above categories will be added together after final exam. The following scale will be used to convert numerical grade in to a letter grade. That is,

92% and above =A	82% - 84% = B	72% - 74% = C	62% - 64% = D
89% - 91% = A-	79% - 81% = B-	69% - 71% = C-	59% - 61% = D-
85% - 88 = B+	75% - 78% = C+	65% - 68% = D+	58% and below = F

Z designation: Academic dishonesty may result in the designation of Z in front of your grade. For more info see <http://z.ucf.edu> Also, check “Honesty” on page 4 of this syllabus.

Incomplete Grade: ‘I’ is given only for students who have completed all of the course assessments with a minimum ‘C’ average and missed the final exam with a valid, documented excuse submitted to the instructor within 24 hours of missing the final exam.

Makeup test: If a test/exam is missed with a valid reason a makeup can be requested.

\*Also check Webcourses homepage for a Makeup request form and makeup policy.

Test / exam policy:

You must have a valid UCF student ID in your possession in order to enter the exam hall. Bring your registered clicker for all the tests. If a last minute alternative must be made for your negligence (low battery, invalid registration, forgotten clicker), there will be a deduction of 1 raw point from your test grade.

When a student leaves the exam hall once the test is in progress, he/she is considered to have completed the exam and will not be allowed back in to the hall to continue the exam.

Students who show up late (more than 5 minutes after the scheduled start) will be marked absent and must follow through the makeup policy. More policies will be announced in class before each test.

Clicker policies: \*Also check the link “Clicker Info” on Webcourses homepage.

Students are expected to follow the same rules as test when using clickers in the classroom. They will not share their clickers with another student or ask someone to use it in their absence. If such an incident occurs, all grades earned by both parties will be marked as ‘0’ grade.

Grade posting & Grade concerns:

Test and final exam grades will be posted on WebCourses course homepage.

Clicker based quiz (and test) grades will be posted on [www.einstruction.com](http://www.einstruction.com)

Log in to this page as student and click “Grades.” Instructor is not responsible for network problems and log in difficulties.

If a re-grading is needed because of student’s fault (either clicker or scantron), 2 raw points will be deducted from that test/exam.

Bring concerns regarding posted grades to the attention of the instructor within one week (24 hrs for final exam and all quizzes) from the date the grades were posted. After this time, the posted grades will become final. Instructor retains the right to change the grade if an error has been made in recording student grades. If such a change is made, student will be informed through UCF Knight’s email. If you do not have one, set up an account at <https://www.secure.net.ucf.edu/KnightsEmailSelfService>

Clicker / Scantron & Score sheets / Completed test review:

We plan to use clicker for all of the tests. After each test, individual feedback will be available on [www.einstruction.com](http://www.einstruction.com) Bring a print out of the feedback with you if you want to review the completed test.

Scantrons will be used as an alternate only if any technical issues occur in the classroom. In such a case, scantrons will be provided to the entire class. In this case, it will take atleast a week to upload the grades. Graded scantrons will not be returned to students. Score sheet will be printed out of the scantron.

Students may review their test during Dr. Rani’s office hours for two weeks after each test.

Other important policies:

Students who are officially registered for this particular course only are allowed to attend the lectures and take the quizzes and tests. Instructor is not responsible for any problems related to registration.

Students must follow the University standards for personal and academic conduct as outlined in The Golden Rule. See <http://www.ucf.edu/goldenrule>

Walking in late and/or leaving early from the lecture hall disrupts the entire class and is NOT allowed.

All kinds of audio/video, cell phones must be turned off inside the class room. If you use laptop in class, use it only for this course-related note-taking. Anyone caught text messaging or emailing inside the classroom will have 5% deduction of their final course grade for every offense.

Recording of class lectures in audio/video form NOT allowed. Duplication and distribution of class lecture and exam questions strongly prohibited. Third parties are selling class notes and other materials from this class without my authorization. Please be aware that such class materials may contain errors, which could affect your performance or grade. Use these materials at your own risk.

Dictionaries, books, study sheets, pocket calculators or organizers, scanning pens, or any other electronic devices NOT allowed for use during class quizzes, tests and examinations.

7. Anyone who interrupts the classroom-learning environment by any kind of disruptive behavior (including the ones in 1 - 6 above), that interferes with the instructor's right to teach and fellow students' right to learn, will be removed from the classroom and appropriate University disciplinary action will be initiated.
8. You are advised to use the course homepage only for BOT4850 related postings. Please remember Dr. Rani does not verify the accuracy of class notes exchanged among students.

Tech help:           Homepage related: Call CDWS 3-0407 or <http://onlinesupport.cdl.ucf.edu/>  
CPS clicker problems, go to [www.einstruction.com](http://www.einstruction.com) 1-888-333-7532

Copyright statement:

The instructor may provide links to various external websites to enhance your understanding of the course content. Students are advised to use caution and good judgment in using such content that should not be copied, duplicated or downloaded. For more info visit:

[http://www.copyright.com/content/cc3/en/toolbar/education/resources/copyright\\_on\\_campus.html](http://www.copyright.com/content/cc3/en/toolbar/education/resources/copyright_on_campus.html)

Disability Statement:

Students who need accommodations must be registered with UCF Student Disability Services, phone (407) 823-2371, before requesting accommodations from the professor.

Students who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations.

Honesty:

The Biology Department presumes that all students will be honest, and that work turned in by the student will indeed be the result of that person's work. Copying the work of others, signing in for someone else, using someone's clickers during classroom activities, or cheating will not be tolerated, and will result in an automatic F for both the offending student and any assisting them. In addition, appropriate University disciplinary action will be initiated along with assigning a Z-grade.

General Policy:

Changes will be made in the above policy if, in my judgment, the interest of learning and fairness dictate such changes. Test score sheets are to be retained by the student until the end of the course or for any questions regarding the course grade.

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