

Biol. 215 Medicinal Plants and Ethnobotany Spring 2019

Professor: Dr. Tonya McKinley

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Office Hours: M-F 11:00-12:00 pm; By Appointment

Class Meetings: Lecture Section 1 T, TH 9:30-10:45 am Science Bld. 204

CRN 20013 4 Credits

Laboratory Section M 1:00-2:50 pm Science Bld. 210

CRN 20014 0 Credits

Inclement Weather Schedule: Lecture 11:05-12:05 pm

Laboratory Section 1 1:45-3:10 pm

The Inclement Weather Schedule for lab has been set by the Division of Natural Sciences and differs from the University Inclement Weather Schedule.

Prerequisites: Biol. 101 and 102 or Biol. 103 or Permission of instructor.

Text: Lewis, Walter H. and Memory P.F. Elvin-Lewis. **Medical Botany: Plants Affecting Man's Health**, 2nd ed., John Wiley and Sons Inc., 2003. ISBN 0-471-62882-4.

Book Report: Booth, Martin. **Cannabis: A History**, Picador, 2003. ISBN 0-312-42494-9.

This syllabus is subject to modification although every effort will be made to adhere to the defined schedule. Additional reading assignments may be given as announced in class. Changes to the syllabus or course schedule may be announced verbally in class at any time. You are responsible for such changes even if not in attendance.

Concord University Mission Statement: <http://www.concord.edu/academics>

Course Description: This course both lecture and lab will examine the mutual relationships between plants and humans. Plants and fungi produce a broad array of chemicals, which influence their role as poisons, medicines and hallucinogens. Plants provide humans with fiber to weave cloth, lumber to build homes, and coal to generate electricity. In traditional peoples plants provide the basis for religious rites. The lecture portion of this course will deal with the poisonous, medicinal and hallucinogenic properties of plants. The ethnobotany component (use of plants by traditional peoples) will be covered in the laboratory portion of the course.

Course Objectives: Explain how poisons interact with the various systems of the human body
Explain how plant based medicines interact with the various systems of the human body
Explain how hallucinogens interact with the various systems of the human body
Discuss the role plants play in indigenous societies

CU Educational Goals: Skills 4, Knowledge 2 & 5

Course Enrollment: You must be enrolled in this course in order to attend lectures, labs and to take exams. If you do not enroll by the first full week of classes, or if you are dropped from the roll sheet by Registrar or Business office, it is your responsibility to re-enroll. Classes missed for being dropped from the roll sheet are considered unexcused. If you miss exams for the above reasons you will not be eligible for a make up exam and your grade for the exam missed will be a 0.

Class Attendance and Participation: Class attendance in both lecture and lab is mandatory. Students are expected to arrive on time and to have read the assigned material in advance of the lecture or laboratory session in which it is scheduled. Attendance and active participation in class and lab will be worth 1 pt. on your final grade. **Students who are late to class (lecture or lab) more than 3 times will not receive their attendance point. Students with more than 2 unexcused lectures or more than 1 unexcused lab will not receive their attendance point.** Excessive class absences will not be tolerated and will be handled according to the guidelines of the Concord University Academic Catalog (you may be IW from the class). **No late work or electronic submissions will be accepted!**

Examinations: Examination questions will be of various formats (multiple choice, fill-in-the blanks, labeling diagrams, short answer, etc.). Exams may be given on the margins of breaks. It is your responsibility to be present to take these exams. Your public and private transportation issues are not my problem.

Lecture exams are designed to fit into a 75 min. class period. This includes the final exam, which is not comprehensive and is just the 4th lecture exam. If you arrive slightly late to a lecture exam, including the final exam, and your classmates are still taking the exam you will have what is left of the 75 min. class period to take your exam. If you arrive very late to a lecture exam, including the final exam, and all your classmates have turned in their exams then you have missed the exam and your grade will be a 0.

If you arrive slightly late to a lab exam the instructor will allow you to take the entire exam. If you arrive very late to a lab exam, and all your classmates have turned in their exams then you have missed the exam and your grade will be a 0.

Make-up Exams: The instructor has final say in determining whether you qualify for a make up exam. Exams may be given on the margins of breaks. It is your responsibility to be present to take these exams. Your public and private transportation issues are not my problem. Oversleeping, forgetting the time and date of your exam, losing track of time because you were studying in the library etc. are not considered valid excuses for missing an exam.

Make-up exams will be administered only if the scheduled exam is missed due to:

Participation in an approved Concord University sponsored activity (athletic trip, academic meeting). **It is your responsibility as the student to provide a paper copy of the approval form that has been signed by the VPAD office. I must have written notice 5 days prior to the event and you must take the exam before you leave or you will receive a 0.**

Illness (if **you** are sick and have a written Doctor's excuse), hospitalization or some serious reason (family emergency or death of an immediate family member). **You must take the make up exam within 48 hrs. after you return to school or you will receive a 0.**

All make up exam times will be determined by the instructor and may begin as early as 7:15 am. No Exceptions!

Accommodations for Students with Disabilities: Students needing special accommodations due to disabilities should contact Disabilities Services by phone (ext. 6086) or e-mail nellison@concord.edu. Written notification of a request for accommodations, from the above agency, needs to be received by me before the end of the first full week of classes. No accommodations will be given without written notification. If a problem occurs part way through the semester, written notification from the above agency needs to be received before any action can be taken. No retroactive measures will be taken to adjust test scores due to lack of documentation.

CU Honor Code: All aspects of the Concord University code of Academic Honesty are in effect for this course.

A Concord University Honor Code was approved by students, staff, faculty, administration, and the CU Board of Governors. The Code states:
"As a member of the Concord University Community I will act with honesty and integrity in accordance with our fundamental principles and I will respect myself and others while challenging them to do the same."

The Honor Code is intended to unite the Concord community behind a culture of honesty, integrity, and civility.

Academic Dishonesty: Academic dishonesty is morally unacceptable as well as destructive to the learning and teaching atmosphere. Academic dishonesty includes the giving or receiving of improper help on examinations or assignments, falsifying

documents, and plagiarism (the act of stealing and using, as one's own, the ideas or the expression of the ideas of another). Such dishonesty can lead to a variety of penalties. Students who violate this code (by cheating on examinations, plagiarism, etc.) will receive a failing grade of 0 for that exam or paper and will be reported to the Department/Division Chairs. The instructor may take further disciplinary action resulting in failure of the course and/or expulsion from the University may occur. See CU Student Handbook for further information and University Catalog Academic Policies and Procedures.

Auditing: Students who wish to change their status from grade to audit must see me before the first exam (lecture or lab) to obtain my permission. No student may change their status to audit, in this course, after the first exam (lecture or lab) is given. Approval for changing to audit requires extenuating circumstances. Audit cannot be used to avoid a poor or failing grade (D or F). See University Catalog Academic Policies and Procedures.

Use of Electronic Devices in the Classroom & Laboratory: Cell Phones and Pagers must be turned off. These types of devices that ring or play music during lecture constitute a classroom disruption. Students who habitually forget to turn off their cell phones and pagers will be IW from the class see the Concord University Academic Catalog. Texting is not permitted under any circumstances. The use of tape recorders to record lecture is permissible. Computers may be used to take notes (IM, net surfing, games etc. during lecture will not be tolerated). **No electronic devices, including internet compatible watches, will be permitted during testing situations! No electronic devices, including internet compatible watches, will be allowed out when exams are returned!** Students who have electronic devices out during a test or when test are returned will be IW from the class.

Lab Rules and Dress Code: There will be no food or drink in lab at any time. You must adhere to proper lab dress code in order to attend lab, take lab exams and to review lab material. Shoes must be worn. Shoes must have closed toes (no crocks, flip-flops, or sandals) and they must cover your heel (closed heel). Shorts and skirts must come to the knees (bare legs above the knee are not allowed). Missing a lab exam for improper dress will result in a grade of 0 for that exam.

Classroom Conduct: Disruptive and unsafe class behavior will not be tolerated and will be handled according to the guidelines of the Concord University Academic Catalog (you may be IW from the class). Habitual lateness is a classroom disruption. Students who are habitually late will find themselves locked out of the classroom and/or may be IW from class.

Book Report: Booth, Martin. **Cannabis: A History**, Picador, 2003. ISBN 0-312-42494-9. Read the book including the preface. The paper should be typed or word-processed and 12-15 pages in total length (including Cover Sheet and Literature

Cited). **Due in lecture (9:30 am) on April 11th.** No electronic submissions will be accepted. No excuses will be accepted for lack of ink in printers, and other such computer problems. Not handing in your paper at this time will result in a lower grade (10 points per day late excluding Saturday and Sunday).

Final Grade Determination:

Average of 4 Lecture Exams X 0.75 = Y

Average of 2 Laboratory Exams & Book Report X 0.25 = Z

Y + Z = G (Final Grade %)

Add on any Attendance Point (1 pt. Maximum)

Grade Scale:

A 90-100 B 80-89 C 70-79 D 60-69 F <60

Date	Topic	Chapter
Jan. 15 T	Intro. Remarks/Historical Overview	1
17 TH	Historical Overview	1, 2
22 T	Historical Overview	2
24 TH	Poisonous Plants	3
29 T	Poisonous Plants	7
31 TH	Poisonous Plants	3
Feb. 5 T	Poisonous Plants	3
7 TH	Poisonous Plants	4
12 T	Poisonous Plants	4
14 TH	Exam 1 (Chapters 1, 2, 3, 4, 7)	
19 T	Cancer Remedies	6
21 TH	Cancer Remedies	6
26 T	Nervous System Remedies	8
28 TH	Nervous System Remedies	8, 19
Mar. 5 T	Cardiovascular Remedies	9
7 TH	Cardiovascular Remedies	9
12 T	Spring Break, No Classes	
14 TH	Spring Break, No Classes	
19 T	Cardiovascular Remedies	9
21 TH	Exam 2 (Chapters 6, 8, 9, 19)	
26 T	Gastrointestinal Remedies	13
28 TH	Gastrointestinal Remedies	13
Apr. 2 T	Urogenital Remedies	15
4 TH	Urogenital Remedies	18
9 T	Antiseptics/Antibiotics/Fungicides	17
11 TH	Antiseptics/Antibiotics/Fungicides	17 BOOK REPORT DUE!
16 T	Pesticides/Antivirals	17

18 TH	Exam 3 (Chapters 13, 15, 17, 18)	
23 T	Hallucinogens	20
25 TH	Hallucinogens	21
30 T	Hallucinogens	22
May 2 TH	Hallucinogens	22
9 TH	Exam 4 (Final Exam Chapters 20, 21, 22) 9:00 am-10:15 am	

Laboratory Schedule Spring 2018

Jan. 14 M	Lab Manual Intro./Development of Agriculture, CH 10 (Text)
Jan. 21 M	No Lab, Martin Luther King Day
Jan. 28 M	Herbs and Spices
Feb. 4 M	Resins
Feb. 11 M	Antibiotic Effect of Spices
Feb. 18 M	Poisonous and Hazardous Plants, CH 5 Allergies (Text)
Feb. 25 M	Edible Plants
Mar. 4 M	First Laboratory Practical Exam*
Mar. 11 M	No Lab, Spring Break
Mar. 18 M	Plant Dyes and Dying Part I
Mar. 25 M	Plant Dyes and Dying Part II
Apr. 1 M	Movies-Jungle Pharmacy/The People's Pharmacy
Apr. 8 M	Isolation of Salicin from Willow Bark
Apr. 15 M	Effects of Drugs on <i>Daphnia</i>
Apr. 22 M	Narc Lab
Apr. 29 M	Second Laboratory Practical Exam*

* The laboratory will be unlocked each morning at 8:00 am and closed and locked at 4 pm or after the last late lab. **No student may review material after hours!** A schedule of classes held in S-210 is posted on the front door. **Do not ask other instructors to let you review while other classes are using the lab!** The laboratory will be closed on lab exam days, to allow the instructor to set up the practicum. Please review prior to this.

Inclement Weather Policy

As a general policy, the University will remain in normal operations during adverse weather conditions. In the event of severe weather conditions, the following may occur:

University Closure

No students or employees are to report.

Classes Cancelled

Students do NOT report BUT employees are expected to report to work at their normal time.

Operating on an Inclement weather Delay

Under this schedule, all 8 a.m. classes will start at 10 a.m. Students and faculty will follow the Inclement Weather Schedule. (See <http://www.concord.edu/emergency-alerts> for Athens/Beckley Inclement Weather Schedules.)

*Announcements invoking the late schedule or other options referenced above are aired on area radio and television stations and are sent as text and email messages to those enrolled for this service.

Emergency Alert System: In an effort to increase safety and security on our campus, Concord University encourages everyone to register for instant text message alerts. Alerts will only be used for security and safety notices. All students, faculty, and staff are eligible to receive text message alerts on their cell phones or email alerts. Please contact the IT Help Desk for further assistance (304-384-5291). See CU Student Handbook for further information and <http://www.concord.edu/emergency-alerts>

Emergency Information: Emergency/courtesy telephones are located at the main entrance of each residence hall and at various other locations on campus. Emergency telephones can be identified by the flashing blue light and will provide the user with a direct link to Public Safety at the press of a button. To report an on-campus emergency, call 304-384-5357 or 911. The Office of Public Safety is located on the bottom floor of the Rahall Technology Center. See CU Student Handbook for further information and <http://www.concord.edu/administration/office-public-safety>

Sexual Harassment & Assault. Federal law, Title IX, and Concord University policy prohibits discrimination, harassment, and violence based on sex and gender (Including sexual harassment, sexual assault, domestic/dating violence, stalking, sexual exploitation, and retaliation). If you or someone you know has been harassed or assaulted, you can receive confidential counseling support through the Concord University Counseling Center (304-384-5290). Alleged Violations can be reported non-confidentially to the Concord University Title IX Coordinator at 304-384-6327 or titleix@concord.edu. Reports to Campus Security can be made at (304-384-5357).

Hardware/Software Needed: NA

Technology Services: Contact the CU Help Desk at extension 5291 from campus or 304-384-5291 off campus. You may also e-mail cuhelpdesk@concord.edu.