

BOTANY OF MODERN MEDICINE (3 CREDITS)

IDH 3931 (#29331), Syllabus for Fall 2024, University of Florida (Gainesville)

Instructor: Alan R. Franck, Ph.D. (Dept. of Natural History)

Email: francka@ufl.edu

Office: 380 Dickinson Hall

Office Hours: Tuesday 9:30 am-11:30 am

Office Phone: (352)273-1984

Class Meeting Times: Tuesday 8:30am–9:20 am, Thursday 8:30am–10:25am

Class Meeting Room: LIT 119 (Little Hall)

Course Description: My goal is for you to become an excellent human biologist, by understanding both botany and human physiology, especially how plants, fungi, and medicines derived from them influence human health and how they were discovered. In this context, we will examine the effects from diet, medicine, poison, recreational use, and the environment. We will pay particular attention to the various molecules produced by plants and fungi and examine their interactions with human physiology at the molecular level (e.g. cell membrane receptors, enzymes, etc.). Much of this will be accomplished by analyzing data from published research and case reports.

Course Objectives: Students completing this course will understand how major medicines have been derived from plants and fungi, human and plant chemistry and their interactions at the cellular level, basic botany, the history and evolution of medicine, and how to conduct and analyze literature research on botanical medicine.

Grading Scale: A: 100–93, A–: 92.99–90, B+: 89.99–87, B: 86.99–83, B–: 82.99–80, C+: 79.99–77, C: 76.99–70, D: 69.99–60, F: 59.99 or below. Grades are **not rounded** to the nearest whole number. ([UF grade points scale](#))

Grades: The final grade (out of 400 pts) for the class will be determined by the following. There are **no dropped grades**.

Class Meetings (100 pts): Students are expected to engage in discussions during class meetings about the course content (3 pts each class period).

Project (60 pts): Students will choose a topic and share research articles of interest (10 pts). Each student will give a ~15 minute presentation (50 pts) on a topic of their choice.

Interview Assignment (10 pts): Students will interview someone who commonly is involved with the use of molecular medicines or plants to treat a health problem, e.g. a nurse, doctor, grandparents, parents, herbalist, naturopath, etc. The purpose is to learn more about actual applied use of medicine.

Herbarium Assignment (10 pts): A plant specimen submitted along with a descriptive label that also cites medicinal/toxic research about the species relevant to the class. You may challenge me to identify the specimen and receive double points if I am unable to do so. You have the potential to make a real contribution to learning about the plants of our world. Follow the detailed instructions on Canvas. Failure to follow instructions will reduce the credit received.

Quizzes (100 pts): Each quiz (10 pts) will cover readings related to course topics.

Exams (120 pts): Four exams (30 pts each) will be given covering course content.

Attendance: Students are expected to attend class meetings. Arrive to class ON TIME and stay for the entire class meeting. If you need to leave early due to unusual circumstances, please let the instructor know.

Lecture Recordings: Recordings of lectures are permitted for personal non-commercial use only. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services.

UF Attendance Policy (reproduced here): “Students may only participate in classes if they are registered officially or approved to audit with evidence of having paid audit fees. The Office of the University Registrar provides official class rolls to instructors. Students are responsible for satisfying all academic objectives as defined by the instructor. Absences count from the first-class meeting. Acceptable reasons for absence from or failure to engage in class include illness; Title IX-related situations; serious accidents or emergencies affecting the student, their roommates, or their family; special curricular requirements (e.g., judging trips, field trips, professional conferences); military obligation; severe weather conditions that prevent class participation; religious holidays; participation in official university activities (e.g., music performances, athletic competition, debate); and court-imposed legal obligations (e.g., jury duty or subpoena). Other reasons (e.g., a job interview or club activity) may be deemed acceptable if approved by the instructor. For all planned absences, a student in a situation that allows an excused absence from a class, or any required class activity must inform the instructor as early as possible prior to the class. For all unplanned absences because of accidents or emergency situations, students should contact their instructor as soon as conditions permit. Students shall be permitted a reasonable amount of time to make up the material or activities covered during absence from class or inability to engage in class activities because of the reasons outlined above. If a student does not participate in at least one of the first two class meetings of a course or laboratory in which they are registered, and they have not contacted the department to indicate their intent, the student can be dropped from the course. Students must not assume that they will be dropped, however. The department will notify students if they have been dropped from a course or laboratory. The university recognizes the right of the instructor to make attendance mandatory and require documentation for absences (except for religious holidays), missed work, or inability to fully engage in class. After due warning, an instructor can prohibit further attendance and subsequently assign a failing grade for excessive absences.”

Canvas: The Canvas course management system will be used throughout this course to post course material, grades, quizzes, announcements, etc. It is your responsibility to ensure that you have Canvas access and are receiving course e-mails.

Academic Dishonesty: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: ‘On my honor, I have neither given nor received unauthorized aid in doing this assignment.’” The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. [Click here to read the Conduct Code](#). If you have any questions or concerns, please consult with the instructor in this class.

Class Materials: Materials provided in this class are subject to the copyright law of the United States (Title 17 U.S. Code) and are for the use of students in this course only. Further reproduction or distribution is prohibited.

Electronic Devices: The instructor reserves the right to restrict or forbid use of electronic devices during class if, in the instructor's opinion, such use is distracting or otherwise prohibitory to the learning environment. Phones and other electronic devices must be silenced during class. Making or receiving phone calls is prohibited. Breach of these guidelines may result in dismissal from the classroom.

Conduct: Disruption of academic process is defined by the University as an act or words of a student in a classroom or teaching environment which, in the reasonable estimation of a faculty member, (a) directs attention from the academic matter at hand (e.g. noisy distractions; persistent, disrespectful, or abusive disruptions of lecture, exam, or academic discussions) or (b) presents danger to the health, safety, or well being of the faculty members or students. As a courtesy to your fellow students and the instructor, please do not converse during lectures. Please make sure all phones are off or set to "silent" (not vibrate). Please make sure laptop speakers are muted. Breach of these guidelines may result in dismissal from the classroom.

Disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here](#) to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Evaluations: Please provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Tentative Schedule: The schedule is subject to change, depending on the progress of the course.

	Tuesday 8:30am–9:20 am	Thursday 8:30am–10:25am	Quizzes due by 11:59pm on dates below	Other Due Dates: due by 11:59pm on dates below
Intro human/plant biology, skin, head, eyes, ears, oral		Aug 22: MB 1	Quiz 1 due Aug 25	
	Aug 27: MB 2	Aug 29: MB 3	Quiz 2 due Sep 1	
	Sep 3: MB 4	Sep 5: EXAM 1 (MB 1-4)		Choose project topic
GI tract, urogenital, circulatory	Sep 10: MB 5	Sep 12: MB 5	Quiz 3 due Sep 15	
	Sep 17: MB 5	Sep 19: MB 6	Quiz 4 due Sep 22	
	Sep 24: MB 7	Sep 26: EXAM 2 (MB 5-7)		
immune, respiratory, musculoskeletal, PNS	Oct 1: MB 8	Oct 3: MB 8	Quiz 5 due Oct 6	Share 5 literature articles about your topic
	Oct 8: MB 9	Oct 10: MB 10	Quiz 6 due Oct 13	
	Oct 15: MB 11	Oct 17: EXAM 3 (MB 8-11)		
CNS, stimulants, depressants, hallucinogens, GMO, organic	Oct 22: MB 12	Oct 24: Guided campus walk	Quiz 7 due Oct 27	
	Oct 29: MB 12	Oct 31: MB 13	Quiz 8 due Nov 3	
	Nov 5: MB 14	Nov 7: MB 15	Quiz 9 due Nov 10	
	Nov 12: MB 16	Nov 14: EXAM 4 (MB 12-16)		
	Nov 19: Project presentations	Nov 21: Project presentations	Quiz 10 due Nov 24	
	Dec 3: Herbarium tour			Plant specimen & Interview Assign. due Dec 3