Cover Sheet: Request 12884

BOT 4XXX Medical and Forensic Plant Biology

Info

Process	Course|New|Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Emily Sessa emilysessa@ufl.edu
Created	7/29/2018 12:31:42 PM
Updated	9/19/2018 9:39:24 PM
Description of request	Requesting a new course number for this class which has previously been offered under BOT4935 (Special Topics). This is an upper-level undergraduate course on uses of plants in medicine and forensics that focuses on relevant aspects of basic plant biology.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CLAS - Biology 011690003	Marta Wayne		7/29/2018
No document changes					
College	Conditionall Approved	CLAS - College of Liberal Arts and Sciences	Joseph Spillane	The College Curriculum Committee conditionally approves this request, with the following: 1) the syllabus does not need to be attached for an undergraduate course proposal; 2) the transcript title should be changed to "Med Foren Plant Bio"; 3) confirm that the course is 4 credit (attached syllabus says 3).	8/24/2018
No document changes					
Department	Approved	CLAS - Biology 011690003	Nicole Gerlach	The requested changes have been made.	9/19/2018
No document changes					
College	Approved	CLAS - College of Liberal Arts and Sciences	Joseph Spillane		9/19/2018
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			9/19/2018
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					

Step	Status	Group	User	Comment	Updated
College Notified					
No document changes					

Course|New for request 12884

Info

Request: BOT 4XXX Medical and Forensic Plant Biology
Description of request: Requesting a new course number for this class which has previously been offered under BOT4935 (Special Topics). This is an upper-level undergraduate course on uses of plants in medicine and forensics that focuses on relevant aspects of basic plant biology.
Submitter: Emily Sessa emilysessa@ufl.edu
Created: 8/27/2018 9:06:55 AM
Form version: 2

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
BOT

Course Level
Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.).

Response:
4

Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.

Response:
Advanced

• 1000 and 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate

4000/5000 and 4000/6000 levels = Joint undergraduate/graduate (these must be approved by the UCC and the Graduate Council)

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
C

Course Title
Enter the title of the course as it should appear in the Academic Catalog.

Response:
Medical and Forensic Plant Biology

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 21 characters (including spaces and punctuation).

Response:
Med Foren Plant Bio

Degree Type
Select the type of degree program for which this course is intended.

Response:
Baccalaureate

Delivery Method(s)
Indicate all platforms through which the course is currently planned to be delivered.

Response:
On-Campus

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Co-Listing Explanation
Please detail how coursework differs for undergraduate, graduate, and/or professional students. Additionally, please upload a copy of both the undergraduate and graduate syllabus to the request in .pdf format.

Response:
N/A - there is no co-listing.

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Fall

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2019

Rotating Topic?
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week on average throughout the duration of the course.

Response:
4

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 50 words or fewer. See course description guidelines.

Response:
Basic plant taxonomy, systematics, phytochemicals, uses of plants by animals and various human cultures, and in the development of modern medicine and drug development. Uses of plant tissues and products in forensic investigations will also be discussed.

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.

Response:
BSC 2011(B)

Completing Prerequisites on UCC forms:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.

Example: A grade of C in HSC 3502, passing grades in HSC 3057 or HSC 4558, and major/minor in PHHP should be written as follows:
HSC 3502(C) & (HSC 3057 or HSC 4558) & (HP college or (HS or CMS or DSC or HP or RS minor))

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system.

Response:
None.

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
Plants are critical for sustaining all life on planet Earth, and they have played a particularly important role in the history of human health and medicine. This is an underappreciated aspect of humanity's relationship with plants. This course covers a number of topics about the basic plant biology that underlies the role of plants in medicine and forensics, including phylogenetics, phytochemistry, use of plants by various animals to treat parasites and infection, the specific plant species that have been used by various human groups to combat illness, the role of bioprospecting in pharmaceutical development and its implications for plant biodiversity, etc. There are no other courses on campus that cover this particular blend of topics. For students interested in botany, plant biology, and particularly medical school (as many of our Biology majors are), this course will increase their appreciation for the intertwined relationship between humans and plants, and the role of plants and plant biology in both the development of medicine and its modern practices.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
By the end of the course, students will be able to do the following:
- Describe the basic structures of a plant and functions of the major plant organs
- Describe the tissue types of plants and how they are used in medicine and forensics
- Describe the major types of compounds and chemicals plants produce, what their roles are in the plants, and how they have been co-opted for use by humans
- Discuss the early history of modern medical science and the role of plants in medicine
- Describe the ways in which plants have been used medicinally throughout human history
- Discuss medical uses of plants in different human cultures at different times
- Describe major classes of drugs that are derived from plants, and how they were discovered
- Explain how plants can be used in crime scene investigations
- Discuss major historical cases where plants played a key role in forensic science
- Evaluate scientific literature and examine conclusions and findings
- Evaluate claims about drugs and whether they have a scientific basis

Course Textbook(s) and/or Other Assigned Reading
Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course.

Response:
None. Weekly readings from the scientific literature are provided on Canvas.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week 1 Plant form and function (organs, vegetative, floral, fruit structures)
Week 2 Phylogeny, doctrine of signatures, classification systems.
Week 3 Nomenclature and phylogenetics
Week 4 Overview of plant systematics, with examples from major groups in lab
Week 5 Plant evolution and plant defenses; overview of major phytochemicals
Week 6 Phytochemicals: Terpenoids and Zoopharmacy: Birds
Week 7 Phytochemicals: Phenolics and Zoopharmacy: Primates
Week 8 Phytochemicals: Alkaloids
Week 9 Phytochemicals: Glycosides
Week 10 Poisons derived from plants
Week 11 Drug development from medicinal plants
Week 12 Traditional uses of plants in human cultures
Week 13 Traditional uses of plants in human cultures
Week 14 Case studies in forensic botany: overview and examples
Week 15 Plant ecology in forensics, microscopic analysis of pollen and other compounds

Links and Policies
Consult the syllabus policy page for a list of required and recommended links to add to the syllabus. Please list the links and any additional policies that will be added to the course syllabus.
Please see: syllabus.ufl.edu for more information

Response:
Attendance Policy and Expected Conduct in Class
- Students are expected to be on time for class, and attendance in all class periods is mandatory. Please contact the instructor at least a week in advance if you must be absent. The policies for allowable absences and make-up work follow the university attendance policies: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx
- Only approved electronic devices may be used in class. Approved electronic devices are laptop computers (when used to take notes or otherwise participate in classroom activities) and voice recording devices. Unapproved electronic devices include cell phones, MP3 players, etc.The policies for allowable absences and make-up work follow the university attendance policies: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx. The student will remain responsible for scheduling any make-up work with the instructor.

UF Counseling Services
- Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
- Career Resource Center, Reitz Union, 392-1601, career and job search services.
- Many students experience test anxiety and other stress related problems. "A Self Help Guide for Students" is available through the Counseling Center (301 Peabody Hall, 392-1575) and at their web site: http://www.counsel.ufl.edu/.

Honesty Policy
- All students registered at the University of Florida have agreed to comply with the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."
- In addition, on all work submitted for credit the following pledge is either required or implied: "On my honor I have neither given nor received unauthorized aid in doing this assignment."

- If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: http://www.dso.ufl.edu/judicial/procedures/academicguide.html.

Accommodation for Students with Disabilities
- Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: http://www.dso.ufl.edu/drp/services/.
- It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

Software Use
- All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

U Matter, We Care
- Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Course Evaluation Policy
- Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades.

Response:
Grading is out of 500 points, with points assigned to assignments as follows:
Discussion participation and writeup (8 x 25 pts) = 200
Debate participation and writeup (2 x 50 pts) = 100
Traditional medicine presentation (1 x 50 pts) = 50
Lab activities/worksheets (100 pts total) = 100
Final crime scene analysis writeup (1 x 50) = 50
Total = 500

Grading scale:
A 450 and above
A- 435–449
B+ 420–434
B 400–419
B- 385–399
C+ 370–384
C 350–369

C- 335–349
D+ 320–334
D 300–319
D- 285–299
E 284 and below

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Dr. Emily Sessa, Assistant Professor, Biology Department