Cover Sheet: Request 14508

new course for CALS curriculum committee (Spider Biology)

Info	
Process	Course New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Lisa Taylor lisa.taylor@ufl.edu
Created	12/4/2019 4:51:59 PM
Updated	7/9/2020 10:58:09 AM
Description of	This is a request for a new course (Spider Biology) to be reviewed by the CALS curriculum
request	committee at their next meeting (Dec 13, 2019)

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS -	Heather		12/5/2019
		Entomology and	Mcauslane		
		Nematology			
		514914000			
No document d	nanges		1		7/0/0000
College	Approved	CALS - College	JOEI H	Corrections requested by the	7/9/2020
			Brendemuni	CALS CC have been	
				addressed.	
SPIDER BIOL	l)GY syllabus	2019 UCC v4 ndf			4/6/2020
University	Pending	PV - University			7/9/2020
Curriculum		Curriculum			170/2020
Committee		Committee			
		(UCC)			
No document c	hanges				
Statewide					
Course					
Numbering					
System					
No document o	hanges				
Office of the					
Registrar					
No document d	nanges				
Acadomio					
Support					
System					
No document changes					
Catalog					
No document changes					
College					
Notified					
No document o	hanges				

Course|New for request 14508

Info

Request: new course for CALS curriculum committee (Spider Biology) Description of request: This is a request for a new course (Spider Biology) to be reviewed by the CALS curriculum committee at their next meeting (Dec 13, 2019) Submitter: Lisa Taylor lisa.taylor@ufl.edu Created: 4/6/2020 2:06:06 PM Form version: 2

Responses

Recommended Prefix ENY Course Level 3 Course Number xxx Category of Instruction Intermediate Lab Code None Course Title Spider Biology Transcript Title Spider Biology Degree Type Baccalaureate

Delivery Method(s) On-Campus Co-Listing No

Effective Term Fall Effective Year Earliest Available Rotating Topic? No Repeatable Credit? No

Amount of Credit 2

S/U Only? No Contact Type Regularly Scheduled Weekly Contact Hours 2

Course Description Course provides an introduction to the biology of spiders and their relatives, with an emphasis on their ecology, behavior, and evolution. Students will learn to identify the members of approximately 20 common spider families as well as several common Florida species.

Prerequisites Sophomore standing

Co-requisites N/A

Rationale and Placement in Curriculum The proposed Spider Biology course would fill an important gap in the current course offerings. Spiders are an incredibly diverse group of arthropods (more than 46,000 species) and they are critical players in both natural and agricultural ecosystems, yet there is currently no formal course that covers their biology.

The proposed course is lecture-based, but involves frequent field trips and hands-on activities and opportunities to interact with living and preserved spiders in both the classroom and field. **Course Objectives** COURSE LEARNING OBJECTIVES: By the end of this course, students will be able to:

1. Identify and compare the morphology and biology of members of the 12 largest arachnid orders and sketch their evolutionary relationships

2. Identify and compare the biology of members of the 20 most common spider families, sketch their evolutionary relationships, and be able to find them in their natural habitat in the field

3. Identify (to species level), describe, and compare the morphology and biology of approximately 25 of the most common local Gainesville species and be able to find them in their natural habitat in the field

4. Compare different groups of spiders in terms of how they sense their environment, find mates and reproduce, find and hunt their prey, protect themselves from predators, interact in social groups, and learn about their environment

5. Describe and compare the roles of different groups of spiders in both natural and agricultural

ecosystems

6. Keep a spider in captivity, make careful behavioral observations of their behavior, and develop hypotheses for the function of the behaviors observed

7. Describe the medical relevance of spider bites and distinguish between those that cause harm to humans (and those that do not)

8. Examine current and ongoing research in the field of spider biology and critique the methods that scientists use to study spiders

9. Critically evaluate common spider myths and misconceptions

Course Textbook(s) and/or Other Assigned Reading REQUIRED TEXT: There will be no required textbook for this course. You will be provided with information in lecture as well as handouts and will be occasionally assigned additional material to read (posted in Canvas). Even though a textbook is not required, I highly recommend the following books, which provide excellent guidance on spider identification, as well as biology and natural history.

• Recommended: Levi, H. & Levi, L. A Guide to Spiders and Their Kin. St Martins Press. (This is a tiny field guide that's great to have on hand whenever you are out in the field)

• Optional: Edwards, GB and Marshall, S. 2002. Florida's Fabulous Spiders. World Pubns. (Great guide to Florida spiders, including many of our common Gainesville species)

• Optional: Foelix, R. 2011. Biology of Spiders. 3rd Edition. Oxford Press. (Great overall textbook on spider biology)

• Optional: Bradley, RA & Buchanan, S. 2012. Common Spiders of North America. U. California Press (An excellent guide for advanced students who want to key out spiders to the genus level).

Weekly Schedule of Topics TENTATIVE COURSE SCHEDULE (FALL 2019): Class Date Topic

Assignments and quizzes

1 21 Aug W

Introduction

2 26 Aug M

Overview of spider & arachnid diversity

- 3 28 Aug W Evolution of arachnids, overview of spider behavior project
- 2 Sept M No class (holiday)
- 4 4 Sept W Evolution, diversity, and identification of spider families (part 1) Canvas discussion 1 due
- 5 9 Sept M Evolution, diversity, and identification of spider families (part 2)
- 6 11 Sept W

Field trip #1 during class – meet at Natural Area (NATL) 7 16 Sept M

Spider mating 1

Spider ID quiz #1 (in class) 8 18 Sept W

Spider mating 2

9 23 Sept M Campus spider walk – common Gainesville spiders

Spider ID quiz #2 (in class)

10 25 Sept W Diversity and ID of common Florida spiders (part 1)

Canvas discussion 2 due1130 Sept M122 Oct W137 Oct M147 Oct M

Original file: Submitted form version 2.pdf

Spider ID quiz #3 (14 9 Oct W	(in class)	
Midterm exam (in 15 14 Oct M	class)	Mimicry in spiders
Canvas discussior 16 16 Oct W 17 21 Oct M 18 23 Oct W	n 3 due	Spider sensory ecology 1 Spider sensory ecology 2 Venom
Canvas discussion 19 28 Oct M 20 30 Oct W 21 4 Nov M 22 6 Nov W	1 4 due	Webs and silk Arachnophobia (movie and critique) Social Spiders Predators of spiders
Canvas discussior	n 5 due	
- 11 Nov M		
No class (holiday) 23 13 Nov W		
Anti-predator defe	nses	
Spider ID quiz #4 24 18 Nov M		
Spiders as predato 25 20 Nov W	ors, using spi Spider	ders for biocontrol sensory ecology (part 2)
Canvas discussior 26 25 Nov M - 27 Nov W 27 2 Dec M	n 6 due Non-sp No clas	ider arachnid diversity (part 1) s – Thanksgiving break Non-spider arachnid diversity (part 2)
Behavioral papers 28 4 Dec M	due	Course wrap-up and review for final exam*

*FINAL EXAM DATE AND LOCATION: TBA Note that this course outline is a tentative schedule; it is subject to change

Grading Scheme ASSESSMENTS AND GRADES: All assignments will be returned within one week, meaning that at any point in the semester, you should be able to calculate your current grade for the course. To be fair to all students, I follow the rules and point system laid out in this syllabus very closely. If you ever have a question about a score you earn, I would be happy to discuss it. I do ask that you address all questions about grading of particular assignments within two weeks of receiving a grade on that assignment.

Your final grade for this course will be based on the following assessments and will be calculated from the percentage of points that you earn out of a possible total of 390 points. The assessments with specific point values are as follows.

Assessment Details Total points % of grade

Spider ID quizzes 4 quizzes at 15 points each (require correct identification of spiders to the family level from photos and/or live specimens) 60pts 15.4% of total grade Exams 2 exams (midterm and final) at 100 points each (consist of a combination of multiple choice

and short answer questions)200pts 51.3% of total gradeSpider behavioral projectA written paper describing your behavioral observations of a livespider during the course of the semester. A rubric will be provided with the assignment.75pts19.2% of total grade

Canvas discussions we begin in class) Class participation Class pa

question about the material covered that will be turned in on a slip of paper and will be worth one pointeach (regardless of correct or incorrect answers)25pts6.4% of total gradeGRAND TOTAL

390pts 100%

Grades will be calculated as follows*:

- A 93-100
- A- 90-92.9
- B+ 88-89.9
- B 83-87.9
- B- 80-82.9
- C+ 78-79.9
- C 73-77.9
- C- 70-72.9
- D 60-69.9
- E 59% and below

*Final percentages are rounded to the nearest whole number to determine your final grade. This means that at any point in the semester, you can simply calculate the percentage of points that you have earned at that stage to estimate your current grade.

Instructor(s) Dr. Lisa Taylor Attendance & Make-up Yes Accomodations Yes UF Grading Policies for assigning Grade Points Yes Course Evaluation Policy Yes

SPIDER BIOLOGY

Course Number: ENY 3XXX (formerly taught as Special Topics courses ENY4905 and ZOO4926) Credit Hours: 2 Fall 2019 Class location: 1027 Steinmetz Hall Class meeting times: Mon and Wed 12:50-1:40 (period 6)



COURSE DESCRIPTION: Course provides an introduction to the biology of spiders and their relatives, with an emphasis on their ecology, behavior, and evolution. Students will learn to identify the members of approximately 20 common spider families as well as several common Florida species.

INSTRUCTOR: Dr. Lisa Taylor 2211 Steinmetz Hall (office) Entomology and Nematology Department Lisa.taylor@ufl.edu Office phone: 352-273-3937

OFFICE HOURS: Mondays 2-3pm or by appointment (email to schedule a time).

COURSE COMMUNICATIONS: If you have questions either before or during the course, feel free to speak with me after class, email me directly at any time, send me a message via Canvas, or visit me during my office hours.

INSTRUCTIONAL METHODS: This course will meet for lecture two times per week (MW 12:50-140pm). **Attendance at class meetings is critical**. While I will post lecture PowerPoints after each lecture, they will not have a lot of text on them, <u>so you need to be in class to take your own notes</u>. Additional course material (assignments, readings, etc.) will be available through Canvas, separated into weekly modules. Your grade in this class will be calculated from the following: two written exams, 4 quizzes, 6 graded Canvas discussions, a written paper on a spider that you keep in captivity during the course of the semester, as well as attendance and participation. See below for the specific point breakdown.

REQUIRED TEXT: There will be no required textbook for this course. You will be provided with information in lecture as well as handouts and will be occasionally assigned additional material to read (posted in Canvas). Even though a textbook is not required, I highly recommend the following books, which provide excellent guidance on spider identification, as well as biology and natural history.

- *Recommended*: Levi, H. & Levi, L. A Guide to Spiders and Their Kin. St Martins Press. (This is a tiny field guide that's great to have on hand whenever you are out in the field)
- *Optional:* Edwards, GB and Marshall, S. 2002. Florida's Fabulous Spiders. World Pubns. (Great guide to Florida spiders, including many of our common Gainesville species)
- *Optional*: Foelix, R. 2011. **Biology of Spiders**. 3rd Edition. Oxford Press. (Great overall textbook on spider biology)
- *Optional:* Bradley, RA & Buchanan, S. 2012. **Common Spiders of North America**. U. California Press (An excellent guide for advanced students who want to key out spiders to the genus level).

COURSE WEBSITE: This course uses the Canvas course management system on E-Learning. Students should follow the provided URL and log on with their GatorLink ID and password: *http://lss.at.ufl.edu*

Spider Biology, 1

PREREQUISITE: Students must have at least sophomore standing to take this course.

COURSE LEARNING OBJECTIVES: By the end of this course, students will be able to:

- 1. Identify and compare the morphology and biology of members of the 12 largest arachnid orders and sketch their evolutionary relationships
- 2. Identify and compare the biology of members of the 20 most common spider families, sketch their evolutionary relationships, and be able to find them in their natural habitat in the field
- 3. Identify (to species level), describe, and compare the morphology and biology of approximately 25 of the most common local Gainesville species and be able to find them in their natural habitat in the field
- 4. Compare different groups of spiders in terms of how they sense their environment, find mates and reproduce, find and hunt their prey, protect themselves from predators, interact in social groups, and learn about their environment
- 5. Describe and compare the roles of different groups of spiders in both natural and agricultural ecosystems
- 6. Keep a spider in captivity, make careful behavioral observations of their behavior, and develop hypotheses for the function of the behaviors observed
- 7. Describe the medical relevance of spider bites and distinguish between those that cause harm to humans (and those that do not)
- 8. Examine current and ongoing research in the field of spider biology and critique the methods that scientists use to study spiders
- 9. Critically evaluate common spider myths and misconceptions

TENTATIVE COURSE SCHEDULE (FALL 2019):

Class	Date	Торіс	Assignments and quizzes
1	21 Aug W	Introduction	
2	26 Aug M	Overview of spider & arachnid diversity	
3	28 Aug W	Evolution of arachnids, overview of spider behavior project	
-	2 Sept M	No class (holiday)	
4	4 Sept W	Evolution, diversity, and identification of spider families (part 1)	Canvas discussion 1 due
5	9 Sept M	Evolution, diversity, and identification of spider families (part 2)	
6	11 Sept W	Field trip #1 during class – meet at Natural Area (NATL)	
7	16 Sept M	Spider mating 1	Spider ID quiz #1 (in class)
8	18 Sept W	Spider mating 2	
9	23 Sept M	Campus spider walk – common Gainesville spiders	Spider ID quiz #2 (in class)
10	25 Sept W	Diversity and ID of common Florida spiders (part 1)	Canvas discussion 2 due
11	30 Sept M	Diversity and ID of common Florida spiders (part 2)	
12	2 Oct W	Field trip #2 during class – on campus, location TBA	

Spider Biology, 2

13	7 Oct M	Review for Exam 1	Spider ID quiz #3 (in class)
14	9 Oct W		Midterm exam (in class)
15	14 Oct M	Mimicry in spiders	Canvas discussion 3 due
16	16 Oct W	Spider sensory ecology 1	
17	21 Oct M	Spider sensory ecology 2	
18	23 Oct W	Venom	Canvas discussion 4 due
19	28 Oct M	Webs and silk	
20	30 Oct W	Arachnophobia (movie and critique)	
21	4 Nov M	Social Spiders	
22	6 Nov W	Predators of spiders	Canvas discussion 5 due
-	11 Nov M	No class (holiday)	
23	13 Nov W	Anti-predator defenses	Spider ID quiz #4
24	18 Nov M	Spiders as predators, using spiders for biocontrol	
25	20 Nov W	Spider sensory ecology (part 2)	Canvas discussion 6 due
26	25 Nov M	Non-spider arachnid diversity (part 1)	
-	27 Nov W	No class – Thanksgiving break	
27	2 Dec M	Non-spider arachnid diversity (part 2)	Behavioral papers due
28	4 Dec M	Course wrap-up and review for final exam*	

*FINAL EXAM DATE AND LOCATION: TBA

Note that this course outline is a tentative schedule; it is subject to change

COURSE POLICIES:

ASSESSMENTS AND GRADES: All assignments will be returned within one week, meaning that at any point in the semester, you should be able to calculate your current grade for the course. To be fair to all students, I follow the rules and point system laid out in this syllabus very closely. If you ever have a question about a score you earn, I would be happy to discuss it. I do ask that you address all questions about grading of particular assignments within two weeks of receiving a grade on that assignment.

Your final grade for this course will be based on the following assessments and will be calculated from the percentage of points that you earn out of a possible total of 390 points. The assessments with specific point values are as follows.

		Total	% of
Assessment	Details	points	grade
	4 quizzes at 15 points each (require correct		
	identification of spiders to the family level from photos		
Spider ID quizzes	and/or live specimens)	60	15.4%
	2 exams (midterm and final) at 100 points each (consist		
	of a combination of multiple choice and short answer		
Exams	questions)	200	51.3%

Spider Biology, 3

Spider behavioral project	A written paper describing your behavioral observations of a live spider during the course of the semester (approx. 2500 words). A rubric with specific guidelines will be provided with the assignment	75	10.2%
Spider benavioral project	A total of C Convos discussions at E points each	75	13.270
	A total of 6 Canvas discussions at 5 points each		
Canvas discussions	(extending discussions that we begin in class)	30	7.7%
	During each class period or field trip (25), students will		
	be asked a practice question about the material		
	covered that will be turned in on a slip of paper and will		
	be worth one point each (regardless of correct or		
Class participation	incorrect answers)	25	6.4%
GRAND TOTAL		390	100%

Grades will be calculated as follows*:

А	93-100
A-	90-92.9
B+	88-89.9
В	83-87.9
B-	80-82.9
C+	78-79.9
С	73-77.9
C-	70-72.9
D	60-69.9
E	59% and below

***Final percentages are rounded to the nearest whole number to determine your final grade.** This means that at any point in the semester, you can simply calculate the percentage of points that you have earned at that stage to estimate your current grade.

For information on current UF policies for assigning grade points, see

https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

ATTENDANCE AND MAKE-UP POLICY: Attendance in this course is crucial for success; you must be present to take notes on the material presented, to take quizzes and exams, and to participate in class activities and discussions.

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <u>https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</u>.

POLICY ON LATE ASSIGNMENTS: Late assignments will be accepted, but will be deducted 20% per day late. This means that assignments that are 5 (or more) days late will earn no credit. Assignments turned in via Canvas must be submitted by 11:59pm on the day they are due.

COURSE TECHNOLOGY: This course will use Canvas (*http://lss.at.ufl.edu*) for posting coure materials and discussions, and submitting assignments. All students must have access to a computer with a reliable Internet

Spider Biology, 4

connection (a high speed connection is recommended). Please be sure to have a backup option in case your computer or Internet connection fails. See the 'Getting Help' section below for technical assistance with Canvas.

UF POLICIES:

SERVICES FOR STUDENTS WITH DISABILITIES: The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

ACADEMIC HONESTY: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/proces/student-conduct-honor-code.

NETIQUETTE: COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Take a moment to read this netiquette guide for online courses: http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

ONLINE COURSE EVALUATION PROCESS

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to 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 in a professional and respectful manner is available at: <u>https://gatorevals.aa.ufl.edu/students/</u>.

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/.

Spider Biology, 5

Summaries of course evaluation results are available to students at: <u>https://gatorevals.aa.ufl.edu/public-results/</u>.

SOFTWARE USE: All faculty, staff and students 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.

GETTING HELP:

For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP select option 2
- <u>https://lss.at.ufl.edu/help.shtml</u>

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help.

CAMPUS HELPING RESOURCES: Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

• University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching

- U Matter We Care, <u>www.umatter.ufl.edu/</u>
- Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/.

Student Complaints:

- Residential Course: <u>https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/</u>
- Online Course: <u>http://www.distance.ufl.edu/student-complaint-process</u>

Spider Biology, 6