



# Syllabus for ZOO Vertebrate Biodiversity Spring 2011

**Lecture times: TBA**

**Lab times: TBA**

**Lecture Instructor: TBA**

**Email: jaholliday@ufl.edu**

**Phone: 229-327-4216**

**Lab TA: TBA**

**I. Course Description:**

The evolution, ecology and conservation of vertebrates. Emphasis is on wild animals, including historic patterns of diversification, adaptation, and current conservation issues.

Laboratory will include field trips.

Prereq: BSC 2011 and 2011L, or equivalent, with minimum grades of C.

**II. Textbook and other materials:**

**Pough, Vertebrate Life, 8<sup>th</sup> edition**

**Target copy: Lab manual**

**III. Credit Hours: 4**

**IV. Course Objectives:**

This course explores the diversity, adaptations, and ecology of vertebrates.

The lectures and labs are coordinated as much as possible so that laboratory work expands upon information provided through lecture and reinforces an understanding of diversity and adaptation.

**V. Policies and requirements:**

**Attendance: Students are expected to attend all scheduled classes.** This course covers a great deal of material; absences/excessive tardiness should be avoided as you may find yourself hopelessly behind. If unavoidable circumstances (= a valid excuse) prevent a student from attending a scheduled class, that student **MUST** notify the instructor in advance or within 24 hours of the missed class so we can arrange for you to make up any work missed (e.g. a test). If a test is missed due to an EXCUSED absence, the student is responsible for scheduling a retest with the instructor. **If the retest is not taken before the next scheduled test, a zero for the missed test will be given.** Students who, without a valid (e.g. doctor's excuse), request to take an exam late, will automatically have 20 pts deducted from their 1st late exam and 30 points from their 2<sup>nd</sup> late exam, and

40 points from their third (In other words, don't call in "sick" because you want more time to study). I will take roll and/or give random quizzes during class. Attendance and preparation will be taken into account when determining your overall grade.

**Classroom behavior:** Behave with courtesy towards your fellow students and the instructor. Avoid talking during lecture time as it is highly disruptive to other students. Cell phones should be turned off before coming to class. Any student who persists in interrupting the class or who acts aggressively/disrespectfully may be asked to leave.

**Grammar:** Correct grammar, punctuation, spelling, capitalization and paragraphing should be incorporated in exams as well as any typed reports. **Spelling and Grammar will be graded.**

**Examinations:** Any material covered during the lecture period *or assigned in your reading* may be included in the examinations. This may include textbook illustrations, films, or lecture material. Lecture tests will consist of 50-100 questions including multiple choice, T/F, short answer, and essay. **Quizzes may be given at any time, without notice.** There will be no make-up quizzes. If a student misses one exam due to a preapproved excused absence, he must make up the missed test before the next exam or receive a zero for the missed test. Extra credit (maximum 5% of total points) is offered in a variety of formats.

**Incomplete ("I"):** If a student has completed the majority of the course work and particular DOCUMENTED circumstances prevent completion of the course in the time allotted, the student may, with the agreement of the instructor, be assigned an "I" pending resolution of the grade. All incompletes **MUST** be resolved by the end of the following term or the student will receive a grade of "E" (failing).

#### **VI. Drop/Add/Withdrawal:**

A student can drop/add during the drop add period with no penalty. After drop/add, a student who drops will receive a W until the date listed in the academic calendar. After that date, the student may be assigned an "E" (fail). **Note: it is the responsibility of the STUDENT to withdraw from a course, not the instructor. Failure to attend class is NOT a drop.**

#### **VII. 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>.

**VIII. 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.

**IX. 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.

**X. 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/>.

## XI. Course assignments and grading policies:

### Grades

Graded Item	Date	Time/Place	Total Points	Percent
Lecture exam 1	Jan 24	In class	100	10
Lecture exam 2	Feb 14	In class	100	10
Lecture exam 3	March 4	In class	100	10
Lecture exam 4	April 4	In class	100	10
Final exam	April 26	See sched.	100	10
Homework assignments	syllabus	In class	200	20.0
Laboratory exams/quizzes/participation	TBA	TBA	300	30.0
		<b>FINAL GRADE</b>	<b>1100</b>	<b>100</b>

Grades: Grading Scale Point Range (%)	Letter Grade	GPA equivalent
≥ 90.00	A	4.0
86.7 – 89.9	A-	3.67
83.3 – 86.6	B+	3.33
80.0 – 83.2	B	3.0
76.7 – 79.9	B-	2.67
73.3 – 76.6	C+	2.33
70.0 – 73.2	C	2.0
66.7 – 69.9	C-	1.67
63.3 – 66.6	D+	1.33
60.0 – 63.2	D	1.0
56.7 – 59.9	D-	0.67
< 56.7	E	0

Note that a “C-“ will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

**XII. Lecture Schedule for Spring 2011 \*\*\* SUBJECT TO REVISION\*\*\*\***

<b>Day/Date</b>	<b>Chapter</b>	<b>Topic</b>
Wednesday Jan 5	2	What is a vertebrate? Vertebrate design Classification and phylogeny of vertebrates.
Friday Jan 7	1, 2 (+ on-line/homework assignment)	Phylogenetic systematics: how to read a tree
Monday Jan 10	2	What is a vertebrate? Organ systems (overview)
Wednesday Jan 12	2	What is a vertebrate? Organ systems (overview)
	3	Jawless vs. jawed fishes; appearance of the gnathostomes
Wednesday Jan 19	4	Living in water
Friday Jan 14	(+ on-line/homework assignment)	Mapping and protecting biodiversity
<b>Monday, Jan 24</b>	<b>Exam 1 (mixed in-class and take-home)</b>	
Wednesday Jan 26	5	Chondrichthyes: diversity, reproduction, human impacts and conservaton
Friday Jan 28	5	Chondrichthyes: diversity, reproduction, human impacts and conservation
Monday Jan 31	6	Osteichthyes: diversity, locomotion, reproduction, human impacts and conservation
Wednesday Feb 2	6 (+ on-line/homework assignment: pollution, habitat loss, over-exploitation and overfishing)	Osteichthyes: diversity, locomotion, reproduction, human impacts and conservation
Friday Feb 4	9	Tetrapoda: living on land
Monday Feb 7	10	Amphibians: diversity and taxonomy
Wednesday Feb 9	10	Amphibians: Gas exchange, metamorphosis, defense, conservation
Friday Feb 11	<b>Exam 2 (mixed in-class and take-home)</b>	
<b>Monday Feb 14</b>	11	Sauropsids vs. synapsids: key differences in anatomy,

		reproduction and thermoregulation
Wed Feb 16	11	Sauropsids: diversity and synapomorphies
Friday Feb 18	12	Turtles are from Mars (evolution, anatomy, reproduction, habitat, adaptations, conservation)
Monday Feb 21	13(+ on-line/homework assignment: habitat loss, exotic species)	Lepidosaurians (tuatara, lizards and snakes)
Wed Feb 23	13	Squamates (lizards and snakes) diversity, anatomy, feeding, reproduction, social behavior, human impacts
Fri Feb 25	13	Squamates (lizards and snakes) diversity, anatomy, feeding, reproduction, social behavior, human impacts
Monday Feb 28	<b>Exam 3(mixed in-class and take-home)</b>	
Wednesday March 2	16.1-16.3	Mesozoic Diapsids: What is a diapsid? Diversity and phylogeny of archosaurs
Friday March 4	16	Archosaurs: ancient swimmers and flyers.
Monday Mar 14	16	Archosauria: Crocodylians: diversity, anatomy, feeding, reproduction, social behavior, conservation
Wed Mar 16	16	Archosauria: saurischians
Friday Mar 18	16 (+ on-line/homework assignment: extinction and climate change)	Archosauria: ornithischians
Monday Mar 21	17	Theropods to Aves: diversity, anatomy, feeding, reproduction, social behavior, conservation
Wed Mar 23	17	Aves: Paleognaths and Neognaths: diversity, anatomy, feeding, reproduction, social behavior, conservation
Friday Mar 25	17	Aves: Neognaths: diversity, anatomy, feeding, reproduction, social behavior, conservation
Monday Mar 28	<b>Exam 4(mixed in-class and take-home)</b>	

Wed Mar 30	20, 21	Synapsid diversification and evolution of the jaw and middle ear
Friday April 1	20, 21(+ on-line/ homework assignment: habitat fragmentation, destruction and human effects)	Mammals: Prototherians, Metatherians: diversity, anatomy, feeding, reproduction, social behavior, conservation
Monday April 4	21	Mammals: Prototherians, Metatherians: diversity, anatomy, feeding, reproduction, social behavior, conservation
Wednesday April 6	(+ on-line/homework assignment)	Endangered species act, frozen zoos, captive breeding, reintroductions
Friday April 8	21	Placentals I: diversity, anatomy, feeding, reproduction, social behavior, conservation
Monday April 11	21	Placentals II: diversity, anatomy, feeding, reproduction, social behavior, conservation
Wednesday April 13	21	Placentals III: diversity, anatomy, feeding, reproduction, social behavior, conservation
Friday April 15	24, 25	Origins and diversity of primates
Monday April 18	24, 25	Origins and diversity of hominids
Wednesday April 20	Wrap up, Catch-up, review	
<b>Final Exam</b>	<b>IN-CLASS only</b>	<b>TBD</b>



**XII. Lab Schedule for Spring 2011 \*\*\* SUBJECT TO REVISION\*\*\*\***

<b>LAB</b>	<b>Day/Date</b>
No labs	Tuesday, January 4, Thursday January 6
Lab 1, Activities 1 (cladistics), 2 (evolutionary thinking); worksheets	Tuesday, January 11 Thursday, January 13
Quiz I Lab 2, Gnathostomes activity 4 (perch dissection); worksheets	Tuesday, January 18 Thursday January 20
Quiz 2 Lab 3: Jawed fish diversity (worksheets/matrix in lab)	Tuesday January 25 Thursday, January 27
Fish trapping field trip	Tuesday February 1 Thursday February 3
Quiz 3 Lab 4: amphibian form, function, diversity, Activity 6 dissection frog, salamander; worksheets	Tuesday February 8 Thursday February 10
<b>Lab Exam Thursday Evening times TBD</b>	<b>Thursday February 17</b>
Lab 5: turtle form, function, diversity; worksheets	Tuesday February 22 Thursday February 24
Quiz 4 Lab 6 Lepidosaur form, function, diversity, snake dissection (optional); worksheets	Tuesday March 1 Thursday March 3
<b>SPRING BREAK</b>	Tuesday March 8 Thursday March 10
Quiz 5 Lab 7 Archosaur form and function, bird anatomy; worksheet	Tuesday March 15 Thursday march 17
Quiz 6 Lab 8 Archosaur diversity; worksheets	Tuesday March 22 Thursday March 24
Quiz 7 Bird field trip	Tuesday March 29 Thursday March 31
Mammal form, function, anatomy, diversity, worksheet	Tuesday April 5 Thursday April 7
<b>Lab Finals (100 pts) Thursday Evening times TBD</b>	<b>Thursday April 14</b>

## CLAS Course Approval Checklist

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- A. Departmental Review: This course has been reviewed (see <http://www.clas.ufl.edu/curriculum/new-courses.html#guidelines> for instructions) and approved by:

\_\_\_\_\_, Title \_\_\_\_\_

E-mail \_\_\_\_\_; Phone number \_\_\_\_\_

- B. External Consultation Results: (sign off from other departments with potential overlap or interest in proposed course, if any)

1. \_\_\_\_\_ Department \_\_\_\_\_ Title \_\_\_\_\_

E-mail \_\_\_\_\_; Phone number \_\_\_\_\_

2. \_\_\_\_\_ Department \_\_\_\_\_ Title \_\_\_\_\_

E-mail \_\_\_\_\_; Phone number \_\_\_\_\_

3. \_\_\_\_\_ Department \_\_\_\_\_ Title \_\_\_\_\_

E-mail \_\_\_\_\_; Phone number \_\_\_\_\_

Brief summary of their comments:

- C. Further information about the course (see CLAS Departmental Review Guidelines)

# Course Overview

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To facilitate review of your course proposal, please provide the following information:

Prefix: \_\_\_ \_\_\_ \_\_\_ Number: \_\_\_ \_\_\_ \_\_\_ Title: \_\_\_\_\_

Catalog Course Description: *maximum of 500 characters (including spaces), must match description provided in the UCC1 form. Aim for a style commensurate with other descriptions in the catalog.*

Place in the Curriculum: *(What is the role of this course in overall program? Will it satisfy requirements for a major or minor? Is it intended primarily for major or minor? Is it replacing a course, or a response to a change in major or minor requirements?)*

Meets a total of \_\_\_\_\_ hours each week for the duration of the semester. (If not for entire semester, please explain)

Grading weights: (what percentage of the grade comes from each exam, report, presentation, and so on; whatever elements constitute the final course grade)

\_\_\_ % of the final grade comes from \_\_\_\_\_ (requirement)

\_\_\_ % of the final grade comes from \_\_\_\_\_ (requirement)

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\_\_\_ % of the final grade comes from \_\_\_\_\_ (requirement)

\_\_\_ % of the final grade comes from \_\_\_\_\_ (requirement)

Texts required (if any) including authors, title, year, publisher:

## List of topics

Week	Topic
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