

# SCIN401

**STUDENT WARNING:** This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

## Course Summary

### Description

**Course Description:** The goal of this course is to introduce students to the biology of the class Mammalia. The course will include a survey of the origins, evolution, diversity, and adaptations of mammals to diverse environments. Topics include taxonomy, reproduction, sensory perception, herbivory, population cycles and behavior. Students will use case studies to apply the concepts of mammalogy to broader problems of species management, biodiversity, and the effects of development and habitat fragmentation on mammals. Prerequisite: SCIN130 or BIOL134

### Course Scope:

This course provides a foundational understanding of the biology of mammals of the world. Topics at the beginning of the course explore the evolutionary history, adaptive radiation, current diversity, and anatomical characteristics of mammals. Major orders and families of Mammalia will be identified and studied. Latter topics will cover the structure and function of mammals with topics including reproduction, physiology, ecology, physiology, and behavior. Course assignments include interactive learning opportunities with these specific topics: direct and indirect field identification of mammals; population estimation for species management; ecological comparison of eutherian (placental) and metatherian (marsupial) mammals; analysis of life history and home range data; population dynamics; and mammalian digestion. Core concepts are applied to the current ecological, evolutionary, and conservation situations of mammals.

### Objectives

After successfully completing this course, you will be able to

- **CO-1** Summarize the nature of mammals, including the origin, evolution, zoogeography, and adaptive radiation of mammalian taxa.
- **CO-2** Compare and contrast characteristics of the major families of mammals found in the U.S. and worldwide.
- **CO-3** Describe the key features of mammalian biology, including reproductive biology, lactation, nutrition, energetics, and nutritional physiology.
- **CO-4** Evaluate factors impacting mammalian species and populations.
- **CO-5** Critically examine literature regarding the reproduction, behavior, evolution, and conservation of mammals.
- **CO-6** Analyze mammalian population and life history data.
- **CO-7** Produce real world applications and recommendations for mammalian problems based on

## Outline

### Week 1: Mammalian Characteristics, Origins, & Classification

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Learning Objectives

**CO-1**

**CO-2**

**CO-3**

Readings

*Vaughan et al. Mammalogy*  
*Chapter 1 (Introduction), Chapter 2 (Mammalian Characteristics),*  
*Chapter 3 (Mammalian Origins),*  
*Chapter 4 (Classification of Mammals)*

**In Course Materials:**

*SCIN 401 Course Syllabus, Lesson 1*

Assignment

**Forum Week 1**

**Case Study Week 1**

### Week 2: Mammalian Diversity: Monotremes & Metatherians

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Learning Objectives

**CO-1**

**CO-2**

**CO-5**

Readings

*Vaughan et al. Mammalogy*  
*Chapter 5 (Monotremata)*  
*Chapter 6 (Metatheria)*

**In Course Materials:**

*Lesson 2*

Assignment

**Forum Week 2**

**Case Study Week 2**

## Quiz Week 2 covering Chapters 1-6

### Week 3: Mammalian Diversity: Afrosoricida, Macroscelidea, Tublidentata, Paenungulata, Cingulata, Pilosa, & Pholidota

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Learning Objectives

**CO-1**

**CO-2**

**CO-7**

Readings

*Vaughan et al. Mammalogy*

*Chapter 7 (Introduction to Eutherian Mammals)*

*Chapter 8 (Afrosoricida, Macroscelidea, & Tublidentata)*

*Chapter 9 (Paenungulata)*

*Chapter 10 (Cingulata, Pilosa, & Pholidota)*

#### **In Course Materials:**

*Lesson 3*

Assignment

**Forum Week 3**

**Case Study Week 3**

**Quiz Week 3 covering Chapters 7-10**

### Week 4: Mammalian Diversity: Dermoptera, Scandentia, & Primates

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Learning Objectives

**CO-1**

**CO-2**

**CO-6**

Readings

*Vaughan et al. Mammalogy*

*Chapter 11 (Dermoptera & Scandentia)*

*Chapter 12 (Primates)*

#### **In Course Materials:**

*Lesson 4*

Assignment

**Forum Week 4**

**Quiz Week 4 covering Chapters 11-12**

## **Week 5: Mammalian Diversity: Rodentia, Lagomorpha, Erinaceomorpha, Soricomorpha, & Chiroptera**

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Learning Objectives

**CO-2**

**CO-4**

**CO-6**

**CO-7**

Readings

*Vaughan et al. Mammalogy*  
*Chapter 13 (Rodentia & Lagomorpha)*  
*Chapter 14 (Erinaceomorpha & Soricomorpha)*  
*Chapter 15 (Chiroptera)*

**In Course Materials:**

*Lesson 5*

Assignment

**Forum Week 5**

**Case Study Week 5**

**Quiz Week 5** covering Chapters 13-15

## **Week 6: Mammalian Diversity: Carnivora, Perissodactyla, Artiodactyla, & Cetacea**

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Learning Objectives

**CO-2**

**CO-3**

**CO-4**

Readings

*Vaughan et al. Mammalogy*  
*Chapter 16 (Carnivora)*  
*Chapter 17 (Perissodactyla)*  
*Chapter 18 (Artiodactyla)*  
*Chapter 19 (Cetacea)*

**In Course Materials:**

*Lesson 6*

Assignment

**Forum Week 6**

**Case Study Week 6**

## Quiz Week 6 covering Chapters 16-19

### Week 7: Mammalian Structure & Function: Reproduction, Physiology, & Echolocation

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Learning Objectives

**CO-3**

**CO-5**

**CO-6**

**CO-7**

Readings

*Vaughan et al. Mammalogy*  
Chapter 20 (Reproduction)  
Chapter 21 (Aspects of Physiology)  
Chapter 22 (Echolocation)

**In Course Materials:**

*Lesson 7*

Assignment

**Forum Week 7**

**Case Study Week 7**

**Research Project**

**Quiz Week 7 covering Chapters 20-22**

### Week 8: Mammalian Ecology & Behavior

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Learning Objectives

**CO-3**

**CO-5**

**CO-7**

Readings

*Vaughan et al. Mammalogy*  
Chapter 23 (Ecology)  
Chapter 24 (Behavior)

**In Course Materials:**

*Lesson 8*

Assignment

**Forum Week 8**

## Evaluation

### Forums

There are eight forum activities in this course, one for each week. The student is responsible for participating in each of the eight forums. Each student will respond to a current topic or situation relevant to mammalogy, answer associated questions as posed by the Professor, offer his/her analysis to the questions posed, and respond **substantively** to at least **two** classmate posts. The initial student forum response will contain significant thought and analysis, utilize outside reference sources, and contain at least 300 words. Initial forum responses are completed by **Wednesday** each week. Responses to classmate posts are significant and substantive by asking probing questions, emphasizing points of agreement, and clearly discussing points of difference (i.e., the posts contain more content than "I agree."). Classmate response posts are a minimum of 75 words and are completed by **Sunday** each week.

### Case Study Assignments

Case Study Assignments contain scenarios, problems, and calculations covering a variety of issues in mammalogy. They explore, expand, and reinforce course topics and course learning objectives. Answers and calculations should follow the specific directions in each Case Study Assignment. Directions for Case Study Assignments are downloaded from the online class and once completed, submitted as a Word Document in the Assignments area of the online classroom. Evaluation will be based on accuracy of calculations, synthesis of data and concepts, and writing standards.

### Final Research Project

The Final Research Project represents the student's synthesis and research of large scale concepts in Mammalogy applied to a specific topic or situation. Final Research Projects represent the student's original work and thought with carefully cited research. The student chooses a research project based a list of potential topics and activities. The student also chooses the format for the research project, either a PowerPoint presentation or written research paper. Specific, detailed instructions and the list of potential topics and activities can be found in the online classroom. **The project should represent significant effort.** Plagiarism is not tolerated and will result in a zero score, at minimum.

### Quizzes

Seven quizzes will cover the reading material from the Vaughan *et al.* *Mammalogy* textbook. The quiz during week two will cover the reading material from weeks one and two. The remaining quizzes will cover the reading material for that week. The first quiz in week 2 contains 20 multiple choice questions. All other quizzes contain 10 multiple-choice questions. Quizzes are not proctored but should represent the student's own work. The student will have two hours take each quiz. It is important that the student does not access the quiz until ready to take the quiz. These are timed quizzes can only be accessed once. The student must complete this quiz during its assigned week.

Please see the [Student Handbook](#) to reference the University's [grading scale](#).

### Grading:

Name	Grade %
Forums	24.00 %
Lesson 1 Forum	3.00 %
Lesson 2 Forum	3.00 %
Lesson 3 Forum	3.00 %
Lesson 4 Forum	3.00 %

Lesson 5 Forum	3.00 %
Lesson 6 Forum	3.00 %
Lesson 7 Forum	3.00 %
Lesson 8 Forum	3.00 %
<b>Research Project</b>	<b>20.00 %</b>
Research Project Week 7	20.00 %
<b>Case Study Assignments</b>	<b>21.00 %</b>
Case Study Week 1	3.50 %
Case Study Week 2	3.50 %
Case Study Week 3	3.50 %
Case Study Week 5	3.50 %
Case Study Week 6	3.50 %
Case Study Week 7	3.50 %
<b>Quizzes</b>	<b>35.00 %</b>
Week 2 Quiz (Chapters 1-6)	5.00 %
Week 3 Quiz (Chapters 7-10)	5.00 %
Week 4 Quiz (Chapters 11-12)	5.00 %
Week 5 Quiz (Chapters 13-15)	5.00 %
Week 6 Quiz (Chapters 16-19)	5.00 %
Week 7 Quiz (Chapters 20-22)	5.00 %
Week 8 Quiz (Chapters 23-24)	5.00 %

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## Materials

**Book Title:** Mammalogy, 5th ed. - The VitalSource e-book is provided via the APUS Bookstore; Hard copy not available from the APUS Bookstore, please try other sources.

**Author:** Ryan, James M.

**Publication Info:** Jones & Bartlett

**ISBN:** 9780763762995

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**Book Title:** You must validate your cart to get access to your VitalSource e-book(s). If needed, instructions are available here - <http://apus.libguides.com/bookstore/undergraduate>

**Author:** N/A

**Publication Info:** N/A

**ISBN:** N/A

## Required Technology

- See the Technology Requirements section of the undergraduate catalog for the minimum hardware and software requirements.
- Microsoft Office 365 is available to APUS students for free. To sign up, visit <http://products.office.com/en-us/student>. If you have questions about accessing the software, please contact Classroom support at [classroomsupport@apus.edu](mailto:classroomsupport@apus.edu).

## Web Sites

In addition to the required course texts, the following public domain web sites are useful. Please abide by the university's academic honesty policy when using Internet sources as well. Note website addresses are subject to change.

Site Name	Website URL/Address
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**Mammalogy on the Internet** <http://www.mammalsociety.org/mammalogy-internet>

**Tree of Life Web Project** <http://www.tolweb.org/Mammalia>

**Animal Diversity Web** <http://animaldiversity.ummz.umich.edu/site/accounts/information/Mammalia.html>

**Wilson & Reeder's Mammal Species of the World** <http://www.vertebrates.si.edu/msw/mswcfapp/msw/index.cfm>

**American Society of Mammalogists: Mammalian Species** <http://www.mammalsociety.org/publications/mammalian-species>

**Mammalian Species pdf Site** <http://www.science.smith.edu/departments/Biology/VHAYSEN/msi/>

**National Geographic Mammals** <http://animals.nationalgeographic.com/animals/mammals/>

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## Course Guidelines

### Citation and Reference Style

- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

### Tutoring

- [Tutor.com](http://www.tutor.com) offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours\* of tutoring provided

by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

## **Late Assignments**

- Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment.
- Generally speaking, late work may result in a deduction up to 15% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

## **Turn It In**

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

## **Academic Dishonesty**

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

## **Submission Guidelines**

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

## **Disclaimer Statement**

- Course content may vary from the outline to meet the needs of this particular group.

## **Communicating on the Forum**

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- "Substantive" means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says "I agree" is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.
- As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.

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# University Policies

## [Student Handbook](#)

- [Drop/Withdrawal policy](#)
- [Extension Requests](#)
- [Academic Probation](#)
- [Appeals](#)
- [Disability Accommodations](#)

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