REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN ZOOLOGY

COLLEGE OF ARTS AND SCIENCES

THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education:

Summer 2007 through Spring 2008

Minimum Credit Hours and Grade Point Averages Required			
Total Hours —	**120**	Upper-Division Within Total	**48**
Major Hours —	**35**		

Grade Point Averages:

Overall & Major: Combined OU/Transfer - **2.00** OU - **2.00**

48 Upper-Division Hours REQUIRED

Zoology—Biomedical Sciences

0407D
Bachelor of Science in Zoology

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in four years.

GENERAL EDUCATION AND COLLEGE REQUIREMENTS
Courses graded P/NP will not apply.

Courses for fulfillment of General Education and College of Arts & Sciences requirements must be from the approved General Education course list published in the Class Schedule or at **http://www.ou.edu/admrec/gened.htm.**

University-Wide General Education (minimum 40 hours) and College of Arts and Sciences Requirements

Core Area I: Symbolic and Oral Communication (9-22 hours, 3-6 courses)

a. **English Composition** (6 hours, 2 courses)
   1. English 1113, Principles of English Composition
   2. English 1213, Principles of English Composition, **or** EXPO 1213, Expository Writing

b. **Foreign Language** (0-13 hours in the same language)
   The College of Arts and Sciences requirement ***cannot be met by high school coursework***.
   1. Beginning Course (0-5 hours) _____
   2. Beginning Course, continued (0-5 hours) _____
   ♦ 3. Intermediate Course (2000 level, 0-3 hours). _____
   One course at the intermediate level or demonstrated competency at that level.

c. **Mathematics** (3 hours, 1 course). _____

Core Area II: Natural Science (7 hours, 2 courses) including one laboratory component.

♦ 1. **Biological Science** _____
Chosen from the following approved General Education designators: BIOL, BOT, HES, MBIO, or ZOO.

♦ 2. **Physical Science** _____
Chosen from the following approved General Education designators: AGSC, ASTR, CHEM, GEOG, GEOL, GPHY, METR, or PHYS.

Core Area III: Social Science (6 hours, 2 courses)

1. Political Science 1113, American Federal Government
2. _____

Core Area IV: Humanities (18 hours, 6 courses)

a: **Understanding Artistic Forms** (3 hours, 1 course) _____

b. **Western Civilization and Culture** (6 hours, 2 courses)
   1. History 1483, U.S., 1492-1865, **or** History 1493, U.S., 1865-Present,
   2. _____ (excluding HIST 1483 and 1493)

c. **Non-Western Culture** (3 hours, 1 course):_____

d. **Additional Core IV Humanities courses** (6 upper-division hours, 2 courses at the 3000- 4000-level). Must be outside the major and selected from Understanding Artistic Forms, Western Civilization and Culture, or Non-Western Culture.

♦ 1. _____

♦ 2. _____

Core Area V: Senior Capstone Experience (3 hours, 1 course): _____

♦ College of Arts and Sciences Requirements: College requirements are not automatically fulfilled by a previous degree.

Computer Literacy Requirement — Students must demonstrate computer proficiency which includes the competent use of a variety of software and networking applications. This requirement may be satisfied by:
1. A high school computer science course that meets curricular requirement; **or**
2. Completion of a college-level course that requires competent use of computing; **or**
3. Completion of a university computer proficiency assessment test.

Some courses required for the major may also fulfill University General Education and/or College of Arts & Sciences Requirements

MAJOR REQUIREMENTS

Thirty hours of major coursework must be completed (exclusive of ZOO 1003, 1005, 1114, 1121, 2124, 2234, 2255, 2343 and 3823).
A grade of C or better must be earned in each course counted for major credit.

ZOOLOGY

1114	Introductory Zoology	(4)
1121	Introductory Zoology Lab	(1)
2011	Critical Evaluation of Biol. Res.	1
2012	Found. In Biomedical Sciences	2
2094	Invertebrate Zoology, **or**	
2204	Comparative Vertebrate Anatomy	
	_____	4
3333	Genetics	3
4983	Senior Seminar (Capstone)	3

One course from each of the following core groups:

POPULATION:
3013 Evolution
3083 Animal Behavior
3403 Principles of Ecology
_____ 3

ORGANISMAL:
3103 Principles of Physiology
3203 Animal Development
_____ 3

CELLULAR:
3113 Cell Biology
4843 Intro. to Molecular Biology
_____ 3

At least one three-hour 4000- or 5000-level course must be completed. This requirement cannot be met by ZOO 4843/5843, 4961, 4983, or 4990/5990.

Two upper-division courses with laboratories must be included in the major work from: 3092, 3101, 3201, 3342, 3403, 4034, 4073, 4083, 4244, 4284, 4493, 5204, 5293, 5364, 5494, 5503, 5693.

_____ 3-4
_____ 3-4
_____ 3-4
_____ 0-4
_____

MAJOR SUPPORT REQUIREMENTS

BOTANY/MICROBIOLOGY

BOT 1114	General Botany, **or**	
MBIO 2815	Intro. to Microbiology, **or**	
MBIO 3813	Fund. of Microbiology	
	_____	3-5

CHEMISTRY

1315	General Chemistry	5
1415	General Chemistry	5
3053	Organic Chemistry, **and**	3
3152	Organic Chemistry Lab, **and**	2
3153	Organic Chemistry	3
3653	Intro. to Biochemistry	3

ETHICS OR HISTORY OF SCIENCE
3013 Hist. of Sci. to Newton, **or**
3023 Hist. of Sci. since 17th Cent., **or**
An approved course in ethics of medicine or biology.
_____ 3

PHYSICS

1311	General Physics Lab I	1
1321	General Physics Lab II	1
2414	Gen. Physics for Life Science, **and**	
2424	Gen. Physics for Life Science,	
or		
2514	Gen. Physics for Engr. & Sci., **and**	
2524	Gen. Physics for Engr.&Sci.	
	_____	4
	_____	4

MATH
1743 Calc. I-Bus., Life & Soc. Sc.,**or**
1823 Calculus & Analytic Geometry I
_____ 3

Free Electives

Electives to bring total applicable hours to 120 including 48 upper-division hours.

INFORMATION CONCERNING GENERAL RULES, REGULATIONS AND MINIMUM REQUIREMENTS

TOTAL HOURS: A minimum of 120 semester hours acceptable toward graduation must be completed.

UPPER-DIVISION HOURS: A minimum of 48 upper-division semester hours acceptable toward graduation must be completed. OU courses numbered 3000 or above are upper-division. Transfer work is counted as lower-division or upper-division credit depending on the level at which it was offered at the institution where it was earned. Two-year college work is accepted only as lower-division credit.

ARTS AND SCIENCES HOURS: At least 80 semester hours of liberal arts and sciences courses are required for a BA degree. At least 55 semester hours of liberal arts and sciences courses are required for a BS degree.

MAJOR WORK: A minimum of 30 semester hours must be earned in the major, including a minimum of 15 credit hours at the upper-division level.

PASS/NO PASS ENROLLMENT: A maximum of 16 semester hours of free elective credit may be attempted under this option.

INDIVIDUAL STUDIES (e.g., courses titled "Independent Study"): A maximum of 12 total semester hours may be counted toward graduation.

MILITARY, MILITARY IN-SERVICE, SKILLS, APPLIED TECHNOLOGY, AND P.E. COURSES: A maximum of 16 semester credit hours of basic skills and/or applied technology courses. No physical education activity courses will be counted toward the 120 semester hours of acceptable credit for graduation.

SENIOR INSTITUTION HOURS: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.

RESIDENCY:

- At least 15 of the final 30 hours applied toward the degree or at least 50 percent of the hours required by the institution in the major field must be satisfactorily completed at the awarding institution.
- At least 15 semester hours of upper-division major work must be completed in residence at OU.
- OU correspondence courses are ***not*** considered resident credit.
- Credits earned via examination are neither resident nor nonresident credit.

GRADE POINT AVERAGES: Students must earn a minimum overall 2.00 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU. Some schools and departments of the College have higher minimum grade point averages required for their students.

SPECIAL DEGREES: Students may qualify for an Honors degree (cum Laude, Magna cum Laude, or Summa cum Laude) by completing specific requirements of the Honors College. A degree will be earned with Distinction if the student completes at least 60 semester hours at OU with at least a 3.60 combined retention GPA and OU retention GPA. A degree will be earned with Special Distinction if the student completes at least 60 semester hours at OU with at least a 3.90 combined retention GPA and OU retention GPA.

APPLICATION FOR GRADUATION: Students must apply for graduation during the term in which they complete their degree requirements in order to graduate in that term. The application is valid for three terms. Application forms are available from the College of Arts and Sciences Academic Services office, Ellison Hall, Room 124. The deadline for completion of all coursework to graduate in a particular term is the last day of classes in that term.

Refer to the OU General Catalog for more complete information.

Suggested Semester Plan of Study — Zoology—Biomedical Sciences - 0407D

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checksheet for official requirements. Students must consult with College of Arts and Sciences and/or Department of Zoology academic advisers to verify that courses selected each semester fulfill the recommended plan and satisfy university, College of Arts and Sciences, and Zoology—Biomedical Sciences major requirements.

Year	FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113, Principles of English Composition (Core I)	3	CHEM 1315, General Chemistry	5
	MATH 1523, Elementary Functions (Core I)	3	ENGL 1213, Principles of English Composition (Core I), **or**	3
	P SC 1113, American Federal Government (Core III)	3	EXPO 1213, Expository Writing (Core I)	
	ZOO 1114, Introductory Zoology	4	MATH 1743, Calculus I for Business, Life & Social Sciences, **or**	3
	ZOO 1121, Introductory Zoology Lab	1	1823, Calculus and Analytic Geometry I	
			ZOO 2012, Foundations in Biomedical Sciences	2
			ZOO 2011, Critical Evaluation of Biological Research	1
			Understanding Artistic Forms (Core IV)	3
	TOTAL CREDIT HOURS	**14**	**TOTAL CREDIT HOURS**	**17**
SOPHOMORE	CHEM 1415, General Chemistry cont.	5	CHEM 3053, Organic Chemistry	3
	PHYS 2414, General Physics for Life Sciences, **or**	4	PHYS 2424, General Physics for Life Sciences, **or**	4
	2514, General Physics for Engineering & Science Majors		2524, General Physics for Engineering & Science Majors	
	PHYS 1311, General Physics Lab I	1	PHYS 1321, General Physics Lab II	1
	ZOO 3333, Genetics	3	ZOO 2094, Invertebrate Zoology, **or**	4
	Non-Western Culture (Core IV)	3	2204, Comparative Vertebrate Anatomy	
			Beginning Foreign Language (Core I)	5
	TOTAL CREDIT HOURS	**16**	**TOTAL CREDIT HOURS**	**17**
JUNIOR	CHEM 3153, Organic Chemistry	3	HIST 1483, United States 1492-1865, **or**	3
	CHEM 3152, Organic Chemistry Lab	2	1493, United States 1865-Present (Core IV)	
	ZOO Major Group Requirement, upper-division	3	HSCI 3013, History of Science to Newton, **or** 3023, History of Science	3
	ZOO Major Lab Requirement, upper-division	1	since 17th Century, **or** Ethics course‡	
	Beginning Foreign Language continued (Core I)	5	Intermediate Foreign Language	3
			BOT/MBIO Support Requirement Elective (BOT 1114, MBIO 2815 or 3813)	3-5
			ZOO Major Group Requirement, upper-division	3
	TOTAL CREDIT HOURS	**14**	**TOTAL CREDIT HOURS**	**15-17**
SENIOR	CHEM 3653, Introduction to Biochemistry	3	ZOO 4983, Senior Seminar (Capstone)	3
	ZOO Major Group Requirement, upper-division	3	ZOO 4000+-level Major Elective (with lab)	4
	ZOO Elective, upper-division	3	Western Civilization & Culture (Core IV)	3
	Humanities, upper-division, outside major (Gen. Ed.)	3	Free Elective, upper-division (3000-4000-level)	3
	Social Science (Core III)	3	Free Elective, upper-division (3000-4000-level)	3
	Free Elective, upper-division (3000-4000-level, if BOT/MBIO support requirement elective completed was lower-division)	0-3		
	TOTAL CREDIT HOURS	**15-18**	**TOTAL CREDIT HOURS**	**16**

*If a student is deficient in computer literacy, please consult their college academic counselor in the Hobson Academic Services Center, ELLH 124, 325-4411, for approved courses.
‡ If an Ethics course is not an upper-division Humanities course, an additional "Humanities, upper-division, outside major (Gen. Ed.)" must be completed.

Bachelor's degrees require a minimum of 48 hours of upper-division (3000-4000) coursework.
This plan of study should not be used in lieu of academic advisement.

Students who transfer from other institutions (particularly community colleges) must verify credit hour and course requirements with their college academic counselor, ELLH 124, 325-4411, **http://ou.edu/cas**. Please make an appointment for a degree check with your college academic counselor once you have earned 90 hours. Appointments may be scheduled at **iAdvise.ou.edu**.