# CHECK LIST FOR THE B.S. DEGREE IN BIOLOGY EMPHASIS IN ZOOLOGY Emphasis Adviser: Dr. David Archibald (LS-262), 2008-2009 Catalog

#### (Use this as a worksheet. Refer to your catalog for official requirements.)

The Emphasis in Zoology includes the core courses of the biology major, emphasis electives selected from particular groups of animal biology course, which include areas such as embryology, physiology, behavior and evolution, and general electives from biology. Emphasis in Zoology students should make a particular effort to gain research experience in zoology through Special Projects, Special Studies, or Undergraduate Research courses.

## PREPARATION FOR THE MAJOR (39 units of lower division courses)

Biol 201A Biol 201B Biol 215 Chem 200 Chem 201 Chem 231	Principles of Cell & Molecular Biol. Principles of Organismal Biology Biostatistics General Chemistry General Chemistry Organic Chemistry (or 232 and 232L)	4 3 5 5		Phys 182A Phys 180B	Calculus for the Life Sciences I Calculus for the Life Sciences II Fundamentals of Physics Physical Measurements Fundamentals of Physics Physical Measurements	3 3 1 3 1	
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The Biology and Microbiology majors are designated as **impacted majors**. All students who are admitted to SDSU and want to declare a biology major are placed in the Biology or Microbiology premajor. All premajors must meet department-specific criteria in order to declare a major, such as a specified minimum grade point average, completion of preparation for the major course requirements with qualifying grades, and satisfaction of the lower-division writing competency requirement. Students may not elect credit/no credit grading for course work needed to satisfy preparation for the major requirements. Visit **www.sdsu.edu/impactedmajors** for details. <u>See Biology Advisors if you do not meet any of these requirements, and especially before retaking *any* courses. \* Admission to SDSU is a separate process and may require similar or additional requirements beyond impacted major requirements.</u>

### **EMPHASIS IN ZOOLOGY (Minimum of 36 upper division units)**

#### **Required courses (15 units):**

Biol 352	Genetics and Evolution	3	Biol 366	Biochem., Cell & Mol. Biol. II	4
Biol 354	Ecology and the Environment	3	Biol 366L	Biochem., Cell & M. Biol. Lab. I	2
Chem 365	Biochem., Cell & Mol. Biol. I	3			

Elective courses (21 units): At least 15 of the required 21 units of upper division electives must be selected from the following courses, including at least 3 units from each of the three groups below (invertebrates, vertebrates, and general zoology). Also, two or more of the electives must be laboratory courses, at least one of which must be an organismal level course selected from Biology 512, 515, 523, 524, 525, 526, 596 Marine Larval Ecol. 1 (F'07on), or 596 Parasitology.

The remaining 6 units can come from those below or can be selected from biology and chemistry courses numbered 350 (except Biology 452, and Chemistry 497, 499, 560A/B), and Oceanography 541. **Prior** approval of a Biology adviser is required for credit in Biology 496, 497, 499, and 596 and other courses not listed, and must be filed with the Office of Advising and Evaluations.

Vertebrate group:							
Biol 512	Evol. & Ecol. Marine Mammals	3		Biol 524	Ornithology	4	
Biol 523	Herpetology	4		Biol 525	Mammalogy	4	
Invertebrate group:							
Biol 515	Marine Invertebrate Zoology <sup>1</sup>	4		Biol 526	Terrestrial Arthropod Biology	4	
Biol 596	Marine Larval Ecology	4		Biol 596	General Parasitology	3	
General zo	oology group:			Biol 546	Systematics and Biodiversity	3	
Biol 508	Coevolution	3		Biol 560	Animal Physiology <sup>1</sup> (offered summer '08)	3	
Biol 509	Evolutionary Biology	3		Biol 576	Developmental Biology	3	
Biol 510	Molecular Evolution	3		Biol 596	Animal Behavior	3	

 Select any other biology major electives (to complete the 21 unit upper division elective requirement):

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 Biol -\_\_\_\_\_\_
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<sup>1</sup> Not all courses are taught each year; these courses may not be taught AY08-09.

<sup>2</sup> Prior approval of the Biology adviser (in LS-135) is needed and papers must be filed with the Office of Advising and Evaluations.