

BIO 109 NATURAL HISTORY OF THE SOUTHWEST

Spring 2012; CRN 21069 (TTh 8:40-11:20 am)

SYLLABUS (subject to change)

Instructor: Dr. Brad Fiero

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Office Hours: TTh 11:30 am – 2:00 pm. Also by appointment.

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Texts: Natural History of the Southwest Lecture Outlines and Lab Manual by Brad Fiero

Optional Texts: A Natural History of the Sonoran Desert by Arizona-Sonora Desert Museum

Home Page Website: <http://wc.pima.edu/~bfiero/> [remainder of syllabus is found here]

MyPima: contains additional course material.

Description: Study of the common plants and animals of the Southwest. Includes their distribution, adaptation, behavior and ecology. Also includes physical geography and geological principles of the region.

Course Objectives: Upon completion of the course, the student will be able to do the following:

1. Apply basic geological principles to interpret the physical setting of the Southwest.
2. Apply meteorological and biological principles to describe the formation of the major biotic communities in the Southwest.
3. Describe major desert adaptations and the process of natural selection.
4. Identify common plants and animals of the Southwest.
5. Integrate basic biological principles and specific natural history information into an understanding of the common plants and animals of the Southwest.
6. Demonstrate skills necessary for life-long learning of natural history including conducting scientific research.

Grading System: Based on percentage of total accumulated points from both lecture and lab.

Evaluation:	Points:	Percentage:
Quizzes	400 pts (16 @ 25 pts)	40%
Identification Tests	200 pts (4 @ 50 pts)	20%
Labs	200 pts (see schedule)	20%
Project	200 pts (see schedule)	20%
Final Exam and Final ID Test*	See below*	
Make-up/Extra-credit (optional)	Bonus 25 pts	Bonus 2.5%
Total Points:	1000 pts	100%

* Final Exam grade replaces the grade received on your lowest 4 quizzes (if it is to your benefit), and the Final ID Test replaces the grade received on your lowest ID Test (if it is to your benefit).

Final Grade:	A =	90 - 100%	900 - 1000 points
	B =	80 - 89%	800 - 899 points
	C =	70 - 79%	700 - 799 points
	D =	60 - 69%	600 - 699 points
	F =	Below 60%	000 - 599 points

POLICIES

Attendance Policy: You are expected to arrive to class on time and actively participate each class period. Tardies and absences usually result in lost points. Quizzes are given out at the beginning of class time and must be completed in the time allotted (usually 10-20 minutes but may be more or less). Field trips and other class activities begin at the start of class and may be missed if you do not arrive to class on time. Complete attendance is mandatory during all student presentations; otherwise presentation points will be forfeited. Because of insurance limitations, non-registered visitors are not allowed at class sessions or on field trips.

Make-up Policy: Quizzes cannot be made up (except through the Final Exam score replacing the lowest 4 quiz grades). Late assignments (ID tests, labs, etc.) that can be made up will be accepted but will be penalized 25%. If you are going to miss class, then in some cases, quizzes and assignments may be turned in early with no loss in credit.

Rebuttal System: If you think you were graded unfairly (or erroneously) on an assignment or quiz, please turn in a written explanation (rebuttal) with your graded assignment/quiz to me within two weeks. I will write a response and return it to you. An appointment can be set up if you disagree with the resolution.

Scholastic Ethic: You are expected to abide by the College's Student Code of Conduct (<http://www.pima.edu/studenterv/studentcode/index.shtml>). Breaches in scholastic ethic (e.g. cheating and plagiarism [see <http://wc.pima.edu/~bfiero/plagrsm.htm>]) will be dealt with severely. If you cheat or plagiarize, you will get a zero on the quiz/assignment and, per College procedures, a letter will be sent to the Division Dean, the Vice President of Instruction, and possibly the Dean of Student Development where further action may occur (including suspension or expulsion from the College).

Be Courteous: No use of phones, ipods, laptops, or other electronic devices in class except with instructor permission or you may be asked to leave the classroom for the day. No talking while the instructor or another student is talking to the class or again you may be asked to leave the classroom for the day. In general, please be respectful of other students and the educational process.

Withdrawal (W): Students who fail to attend the first class or fail to attend 3 consecutive classes without notifying the instructor may be withdrawn. If you decide you cannot continue in class, then officially withdraw by the official deadline. If you wish to receive a grade of "W" after the withdrawal date, please request this in writing to the instructor; however, granting a grade of "W" after the withdrawal deadline is up to the discretion of the instructor.

Incomplete (I): Given only when a student has missed 20% or less of the course material for a reason acceptable to the instructor. Eligibility for an incomplete requires earned grades that average "C" or above at the time of request.

Posting of Grades: Grades will be posted anonymously using a "secret code" supplied by the student. In addition, grades may be sent by email. If you do not wish your grades to be posted or emailed, please inform the instructor.

Americans with Disabilities Act: Pima Community College is committed to providing accommodations for qualified individuals with disabilities in a timely and effective manner. To request a reasonable accommodation, students must be registered with the campus Disabled Student Resources (DSR) office. Accommodations will be made based on eligibility determined by Disabled Student Resources. Services can be requested at any time during the semester. Requesting services well in advance will help to ensure that resources are available when needed. Please contact a DSR office at 206-4500 or DSRhelp@pima.edu.

Mandatory Reporting Statement. Please be advised that, as a faculty member of Pima Community College, I am required by law (A.R.S. §13-3620), to report, upon reasonable belief, any situation that may indicate that a minor (defined as someone under the age of 18) has been the victim of child abuse (including physical injury and/or sexual conduct). This duty also includes the obligation to report any previous abuse of a minor, regardless of the current age of the victim to the College's Department of Public Safety (DPS).

LABS: Please note that most labs will be held outside where proper clothing is necessary (e.g. walking shoes, hat, etc.). Field trips take place within class time barring unforeseen circumstances (caution: we leave promptly).

PROJECT: Information is online at http://wc.pima.edu/~bfiero/bio109/project/109_project.htm

Bio 109 Grade Tracking Sheet

Grading Rubrics online at: <http://wc.pima.edu/~bfiero/bio109/rubrics.htm>

Quizzes (400 pts): 16 @ 25 pts each = 40% of final grade

Quiz 1 _____	Quiz 9 _____	Quiz 17 _____	(replaces lowest quiz)
Quiz 2 _____	Quiz 10 _____	Final Exam _____	(replaces 4 lowest quizzes)
Quiz 3 _____	Quiz 11 _____		
Quiz 4 _____	Quiz 12 _____		
Quiz 5 _____	Quiz 13 _____		
Quiz 6 _____	Quiz 14 _____		
Quiz 7 _____	Quiz 15 _____		
Quiz 8 _____	Quiz 16 _____		
Total Quizzes _____			

Identification (ID) Tests (200 pts): 4 @ 50 pts each = 20% of final grade

Plant ID Test _____	
Bird ID Test _____	
Arthropod/Fish/Amphibian ID Test _____	
Reptile/Mammal ID Test _____	
Final ID Test (replaces lowest ID Test) _____	Total ID Tests _____

Laboratories = 200 pts. = 20% of final grade

Plant Field Trip (20) _____	
Plant Community Study (25) _____	
Bird Field Trip (20) _____	
Bird Census (25) _____	
ASDM Field Trip (20) _____	
Owl Pellets Lab (25) _____	
Wildflower/Pollinator Lab (25) _____	
Geological Detective (20) _____	
Geology Field Trip (20) _____	Total Lab Grade _____

Project = 200 pts. = 20% of final grade

Research Question (5) _____	
Proposal Checklist (10) _____	
Proposal (30) _____	
Report Data (15) _____	
Report Checklist (10) _____	
Report (100) _____	
Revised Report _____	
Presentation (30) _____	Total Project _____

Make-up/Extra-credit = 25 pts. = 2.5% added to grade Mini-lecture Adds _____

Total Points = 1000 pts **Grand Total** _____

Grade Percent = Grand Total _____ / 1000 points possible = _____ X 100 = _____ %

FINAL GRADE:

A	=	90 - 100%	=	900 - 1000 points
B	=	80 - 89%	=	800 - 899 points
C	=	70 - 79%	=	700 - 799 points
D	=	60 - 69%	=	600 - 699 points
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**BIO 109: NATURAL HISTORY OF THE SOUTHWEST
SPRING 2012 (21069) TTh TENTATIVE SCHEDULE**

<u>DATE</u>	<u>ACTIVITIES</u>	<u>DUE DATES</u>
Jan 17	Introduction	
Jan 19	Venomous Animals	
Jan 24	Science	Quiz 1
Jan 26	Classification	Quiz 2
Jan 31	Plants 1	Quiz 3; Research Question (5)
Feb 2	Plants 2	Quiz 4
Feb 7	<i>Plant Field Trip (20)</i>	Quiz 5; Proposal Checklist (10)
Feb 9	<i>Plant Community Study (25)</i>	
Feb 14	Desert Climate 1	Research Proposal (30)
Feb 16	Desert Climate 2	Quiz 6; Plant ID Test (50)
Feb 21	Adaptation	Quiz 7
Feb 23	HOLIDAY	
Feb 28	Desert Adaptation	Quiz 8
Mar 1	<i>Wildflower/Pollinator Relationships (25)</i>	Quiz 9
Mar 6	Birds	
Mar 8	Birds	Quiz 10
Mar 13/15	SPRING BREAK	
Mar 20	<i>Bird Field Trip (20)</i>	
Mar 22	Mating Systems	Bird ID Test (50)
Mar 27	<i>Bird Census of Pima Grounds (25)</i>	
Mar 29	Insects and Other Arthropods	Quiz 11; Report Data (15)
Apr 3	Fish, Amphibians, Reptiles	Quiz 12
Apr 5	<i>ASDM Field Trip (20) Cost may be \$5 at door</i>	
Apr 10	Mammals	Quiz 13; Arth/Fish/Amph ID Test (50); Report Checklist (10)
Apr 12	Mammals <i>Owl Pellets (25)</i>	Quiz 14; Report (100)
Apr 17	Plate Tectonics	
Apr 19	Geology Concepts <i>Geology Detective (20)</i>	Quiz 15
Apr 24	Geology of the SW	Quiz 16; Rept/Mamm ID Test (50); Revised Report
Apr 26	<i>Geology Field Trip (20)</i>	Quiz 17; Last day for makeups
May 1	Presentations	Presentations (30)
May 4	Presentations	Presentations
May 8	Review for Final Exam	
May 10	Final Exam and Final ID Test	

* Lab studies are indicated above by italics and bold. Number in parentheses following the lab indicates the lab's point value.