

# NAT 180B: NATURAL HISTORY SERIES - DESERTS

## Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2021
Credits:	2
Total Contact Hours:	36
Lecture Hours :	36
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	72
Transferable to CSU:	Yes
Transferable to UC:	No
Grading Method:	Standard Letter, Pass/No Pass

## Catalog Course Description

A field course where the topography, climate, geology, ecology, life zones, wildlife, plant life, and human history of the desert region will be covered. Possible locations of interest but not restricted to include high desert, Anza Borrego-Salton Basin, Western Colorado Plateau, Eastern Colorado Plateau, Southeastern Arizona, Trans-Pecos or Baja California. In addition to lectures on campus, there will be a minimum of a three day field trip to the region. A transportation fee may be assessed. 36 lecture hours.

## Course Objectives

- Articulate an understanding of biological, ecological, geological and climatological processes using scientific terminology.
- Evaluate information released from various federal, state and local agencies.
- Analyze the intra- and interspecific actions and relationships of living organisms within the region.
- Investigate genetic variations and adaptations among plant and animal species.
- Explore energy flow mechanisms.
- Examine how human activities have contributed to positive and negative changes in the environment.

## Major Course Content

1. Introduction to the Desert Region
2. The Geology of the Region - structural geology, the origin of rocks, erosion, and climate
3. Plants and Plant Communities of the Area - common plant forms and plant communities
4. Animals and Animal Distribution of the Area
  - a. identification of animal forms present in the region (native and nonnative)
  - b. animal adaptations necessary for survival in mountains
  - c. collecting and sampling techniques
5. Principles of Ecology Field Class Organization - food chains, food webs and energy flow
6. A Minimum of Three Days of Classes to the Region
7. Human History of the Region

8. Critique Session
  - a. summary of what was seen on the field trip
  - b. human influences upon the region

## Examples of Required Writing Assignments

On our trip to the area visited, we observed many different types of geological formations that have been weathered throughout time. One of the coolest sites was the \_\_\_\_\_ (depends on the place visited). Explain at least three different types of erosion that has/have occurred at this site. Do not forget the type of rock present.

## Examples of Outside Assignments

### Journal Assignment

At the conclusion of this class, you will turn in a journal (flash drive or DVD) that will be worth 33% of your overall grade.

The journal will be a PowerPoint presentation and at least 28 pages or greater in length and includes the following: a title page, table of content, at least 25 pages of trip details/sites/animals/plants/geology/ecology/ etc., and a literature cited page.

Your journal will need to include photos from the weekend trip with a detailed description of the photo's relevance to that trip, including some scientific theory (theories) or interesting facts.

An example journal will be available during lecture.

The writing that accompanies the pictures should be detailed and a minimum of 2 paragraphs - for example, a broad picture of a canyon could include a brief discussion of the organisms that populate this area as well as their adaptations to the area (in other words, something that was discussed or read about that specific area).

## Instruction Type(s)

Lecture, Online Education Lecture