ERTHS 85.2 Course Outline as of Spring 2015

CATALOG INFORMATION

Dept and Nbr: ERTHS 85.2 Title: PEPPERWOOD- BIOTIC ENVT
Full Title: Pepperwood Natural History- Biotic Environment
Last Reviewed: 9/14/2020

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	2.00	Lab Scheduled	1.50	8	Lab Scheduled	26.25
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50 Total Student Learning Hours: 105.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	BIO 85.2
Formerly:	

Catalog Description:
A survey of the natural history of the Pepperwood Preserve, emphasizing the flora, fauna, and ecology (offered Spring semester only). Laboratory hours are primarily in the field and will include hiking over uneven terrain. This course (along with BIO/ERTHS 85.1) is a component of the Pepperwood Preserve Steward training program.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 1A or equivalent

Limits on Enrollment:

Schedule of Classes Information:
Description: A survey of the natural history of the Pepperwood Preserve, emphasizing the flora, fauna, and ecology (offered Spring semester only). Laboratory hours are primarily in the field and will include hiking over uneven terrain. This course (along with BIO/ERTHS 85.1) is a component of the Pepperwood Preserve Steward training program. (Grade or P/NP)
Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 1A or equivalent
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Transferable	Effective:	Fall 2009	Inactive:
UC Transfer:		Effective:		Inactive:

CID:

Certificate/Major Applicable:
Major Applicable Course

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Describe the role of science in understanding natural history.
2. Relate knowledge of natural history to becoming a naturalist, a nature preserve docent, and/or a land steward.
3. Integrate knowledge about the interconnectedness of abiotic and biotic facts (including human) and their influence on the natural history of Pepperwood Preserve.
4. Demonstrate skills in making and recording observations in a field journal.

Objectives:
Upon completion of the course, students will be able to:
1. Explain the discipline and scope of natural history.
2. Interpret the land use and natural history of the Pepperwood Preserve.
3. Orient themselves to the geography of the Pepperwood Preserve.
4. Record field observations in a field journal..
5. Evaluate and differentiate the ecological and adaptive traits of the flora and fauna at Pepperwood Preserve.
6. Identify a selection of common species at the Pepperwood Preserve.
7. Employ and interpret techniques for sampling and monitoring flora and fauna.
8. Demonstrate naturalist and/or land steward skills.

Topics and Scope:

I. Introduction to Natural History
   A. The discipline of natural history and the scientific method
   B. Natural history of Pepperwood
      1. Overview of regional and local history at Pepperwood
      2. Land use history at Pepperwood

3. Orientation to the preserve
C. Writing a field journal

II. Community Ecology
A. Overview to species interactions, adaptation, and the ecological niche
B. Vegetation factors
1. Components of community structure
2. Ecosystem function
C. Plant communities at Pepperwood
D. Management issues at Pepperwood

III. Plants
A. General characteristics of plants
B. Overview of major taxonomic groups
C. Seed plants: morphology and reproduction
D. Common plants at Pepperwood
E. Evolutionary Processes in Wildflowers

IV. Animals
A. General characteristics of animals
B. Overview of major taxonomic groups, emphasizing terrestrial arthropods and chordates
C. Animal adaptations to life on land
D. Common animals at Pepperwood
E. Methods of observing and identifying animals

V. Methods of Natural History Interpretation
A. Effective oral communication for target audience
B. Use of demonstration materials
C. Planning of interpretation event for target audience

Assignment:

1. Reading from selected journal papers and texts: 20-30 pages per week
2. Quizzes: (3- 5) multiple choice and short answer questions
3. Oral presentation demonstrating skills as a natural history interpreter
4. Completion of a field journal
5. Final exam: multiple choice and short answer questions

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Field journal	Writing 20 - 40%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None	Problem solving 0 - 0%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Oral presentation	Skill Demonstrations 10 - 20%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes and final exam	Exams 40 - 50%

Other: Includes any assessment tools that do not logically fit into the above categories.

Participation and attendance	Other Category 10 - 20%

Representative Textbooks and Materials:
The California Naturalist Handbook, de Nevers, G., et, University of California Press, 2013

An Island called California, Bakker, E, University of California Press, 1984 (classic)

A Natural History of California, Schoenherr, A.A., University of California Press, 1992 (classic)

The Sibley Field Guide to Birds of Western North America, Sibley, D.A., Knopf Publishing, 2003 (classic)

Trees and Shrubs of California Coast (California Natural History Guides, 62), Stuart, J.D., and J.O. Sawyer, University of California Press, 2001 (classic)

Introduction to California Plant Life (California Natural History Guides, 69), Ornduff, R., et al., University of California Press, 2003 (classic)

Spring Wildflowers of California of the Foothills, Valley and Coast (California Natural History Guides, 75), Munz, P.A., University of California Press, 2004 (classic)

Mammals of California (California Natural History Guides, 66), Jameson, E.W., and Peeters, H.J., University of California Press, 2004 (classic)