MERRITT COLLEGE COURSE OUTLINE

COLLEGE:		**STATE APPROVAL DATE:**	08/11/2017
ORIGINATOR:	Ronald Felzer	**STATE CONTROL NUMBER:**	CCC000584845
		BOARD OF TRUSTEES APPROVAL DATE:	04/25/2017
		CURRICULUM COMMITTEE APPROVAL DATE:	04/03/2017
		CURRENT EFFECTIVE DATE:	01/22/2018

DIVISION/DEPARTMENT:

1. REQUESTED CREDIT CLASSIFICATION:

Credit - Degree Applicable
Course is not a basic skills course.
Stand-alone

2. DEPT/COURSE NO:

BIOL 065F

3. COURSE TITLE:

Natural History of Tahiti (French Polynesia)

4. COURSE: MC New Course

TOP NO. 0408.00

5. UNITS: 1.000

HRS/WK LEC: 1.00 Total: 17.50
HRS/WK LAB:
HRS/WK TBA:

6. NO. OF TIMES OFFERED AS SELETED TOPIC: **AVERAGE ENROLLMENT:**

7. JUSTIFICATION FOR COURSE:

Islands represent microcosms of our world at-large, and their discrete size make them manageable natural laboratories for studying the interplay between land area and isolation, and for projecting the future effects of fragmentation on our natural world. Islands can teach valuable lessons about what may happen on larger land masses if we don't change human behavior. This course represents the second in a series of courses focused on islands for the Natural History Certificate. It specifically focuses on the five Pacific archipelagoes comprising the political entity known as "French Polynesia," but more colloquially known as Tahiti. Tahiti's biodiversity is especially interesting because its islands are among the most remote in the world, creating ideal conditions for evolution to shape the endemic flora and fauna. In addition, several of the islands are under dire threat from climate change.

8. COURSE/CATALOG DESCRIPTION

Overview of geology, flora, and fauna of Tahiti: French Polynesia; botany; zoology; biogeography.

9. OTHER CATALOG INFORMATION

a. Modular: No If yes, how many modules:
b. Open entry/open exit: No
c. Grading Policy: Both Letter Grade or Pass/No Pass
d. Eligible for credit by Exam: No
e. Repeatable according to state guidelines: No
f. Required for degree/certificate (specify):
Natural History
g. Meets GE/Transfer requirements (specify):
Meets CSU requirements
h. C-ID Number: Expiration Date:

i. Are there prerequisites/corequisites/recommended preparation for this course? No
j. Acceptable for Credit: CSU/UC

10. LIST STUDENT PERFORMANCE OBJECTIVES (EXIT SKILLS): (Objectives must define the exit skills required of students and include criteria identified in Items 12, 14, and 15 - critical thinking, essay writing, problem solving, written/verbal communications, computational skills, working with others, workplace needs, SCANS competencies, all aspects of the industry, etc.)(See SCANS/All Aspects of Industry Worksheet.)

Students will be able to:

1. Define the field of natural history and how it relates to both biology and science at-large.
2. Explain why islands are particularly useful ecosystems for studying the biological processes of evolution and ecology and how humans have affected and interacted with those processes.
3. Explain MacArthur and Wilson's Equilibrium Theory of Island Biogeography in layman's terms along with subsequent variations to the theory.
4. Explain the formation of all island types in the five archipelagoes of French Polynesia.
5. Demonstrate understanding of the theory of evolution, with particular emphasis on natural selection, and apply that knowledge to an explanation of the endemic biodiversity of Tahiti.
6. Contextualize the human history of Tahiti within the broader evolutionary and geological history of the islands; how did the indigenous Tahitians interact with biodiversity, and how did the geography of the islands impact humans in similar or different ways from non-human life?
7. Disentangle the impact of invasive and non-native species on endemic biodiversity from naturally-occurring processes.
8. Write a report on a species endemic to Tahiti which explains the species' broader phylogenetic context and which elucidates the importance of the species to the local ecosystem.

11A. COURSE CONTENT: List major topics to be covered. This section must be more than listing chapter headings from a textbook. Outline the course content, including essential topics, major subdivisions, and supporting details. It should include enough information so that a faculty member from any institution will have a clear understanding of the material taught in the course and the approximate length of time devoted to each. There should be congruence among the catalog description, lecture and/or lab content, student performance objectives, and the student learning outcomes. List percent of time spent on each topic; ensure percentages total 100%.

LECTURE CONTENT:

Introduction to Natural History: 5%

Island Biogeography Theory: 10%

Island Formation/Geology: 10%

Island Plants: 10%

Island Birds: 10%

Island Reptiles and Amphibians: 5%

Island Insects: 10%

Island Mammals: 5%

Island Marine Life: 5%

Island Anthropology: 10%

Island Conservation: 10%

Island Land Use: 5%

Connection to Arts/Humanities: 5%

11B. LAB CONTENT:
N/A

12. METHODS OF INSTRUCTION (List methods used to present course content.)

1. Activity
2. Lecture
3. Observation and Demonstration
4. Discussion
5. Projects
6. Critique
7. Multimedia Content

13. ASSIGNMENTS: 2.00 hours/week (List all assignments, including library assignments. Requires two (2) hours of independent work outside of class for each unit/weekly lecture hour. Outside assignments are not required for lab-only courses, although they can be given.)
Out-of-class Assignments:
Students will be required to do a capstone writing assignment on a Tahitian endemic species of their choice. They will write a 2-3 page report explaining the evolutionary history and contemporary relevance of their species.

ASSIGNMENTS ARE: (See definition of college level):
Primarily College Level

14. STUDENT ASSESSMENT: (Grades are based on):
ESSAY (Includes "blue book" exams and any written assignment of sufficient length and complexity to require students to select and organize ideas, to explain and support the ideas, and to demonstrate critical thinking skills.)
NON-COMPUTATIONAL PROBLEM SOLVING (Critical thinking should be demonstrated by solving unfamiliar problems via various strategies.)

15. TEXTS, READINGS, AND MATERIALS

A. Textbooks:

Rapaport, Moshe. *The Pacific Islands: Environment and Society.* 2nd University of Hawaii Press, 2013.

*Date is required: Transfer institutions require current publication date(s) within 5 years of outline addition/update.

B. Additional Resources:

Library/LRC Materials and Services:

The instructor, in consultation with a librarian, has reviewed the materials and services of the College Library/LRC in the subject areas related to the proposed new course

Are print materials adequate? No

Are nonprint materials adequate? Yes

Are electronic/online resources available? Yes

Are services adequate? Yes

Specific materials and/or services needed have been identified and discussed. Librarian comments:

C. Readings listed in A and B above are: (See definition of college level):

Primarily college level

16. DESIGNATE OCCUPATIONAL CODE:
E - Non-Occupational

17. LEVEL BELOW TRANSFER:
Y = Not Applicable

SUPPLEMENTAL PAGE

Use only if additional space is needed. (Type the item number which is to be continued, followed by "continued." Show the page number in the blank at the bottom of the page. If the item being continued is on page 2 of the outline, the first supplemental page will be "2a." If additional supplemental pages are required for page 2, they are to be numbered as 2b, 2c, etc.)

;

STUDENT LEARNING OUTCOMES

1. **Outcome:** Demonstrate a solid understanding of the definition and relevance of natural history to human society.
   This outcome maps to the following Institution Outcomes:
   • Cultural Awareness - Through knowledge of history and cultural diversity, recognize and value perspectives and contributions that persons of diverse backgrounds bring to multicultural settings and respond constructively to issues that arise out of human diversity on both the local and the global level.

   Assessment: Students will be asked to define and elaborate on the utility of natural history in exams and in-class assignments.

2. **Outcome:** Explain the uniqueness of island ecosystems, and how the geographic features of islands affect the biodiversity that lives and evolves on them.
   This outcome maps to the following Institution Outcomes:
   • Critical Thinking - Think critically using appropriate methods of reasoning to evaluate ideas and identify and investigate problems and to develop creative and practical solutions to issues that arise in workplaces, institutions, and local and global communities.

   Assessment: Answer questions requiring an explanation of the equilibrium theory of island biogeography on exams and on in-class assignments.

3. **Outcome:** Articulate the importance and evolutionary context of a species endemic to Tahiti.
   This outcome maps to the following Institution Outcomes:
   • Critical Thinking - Think critically using appropriate methods of reasoning to evaluate ideas and identify and investigate problems and to develop creative and practical solutions to issues that arise in workplaces, institutions, and local and global communities.

   Assessment: Write a report on a species endemic to Tahiti which explains the species' broader phylogenetic context and local importance.

4. **Outcome:** Elucidate the importance and vulnerability of Tahitian islands to global change, with specific emphasis on climate change.
   This outcome maps to the following Institution Outcomes:
   • Communication - Communicate with clarity and precision using oral, nonverbal, and/or written language, expressing an awareness of audience, situation, and purpose.

   Assessment: In-class writing assignments focused on global warming/climate change.

Generated on: 9/9/2017 8:21:07 PM